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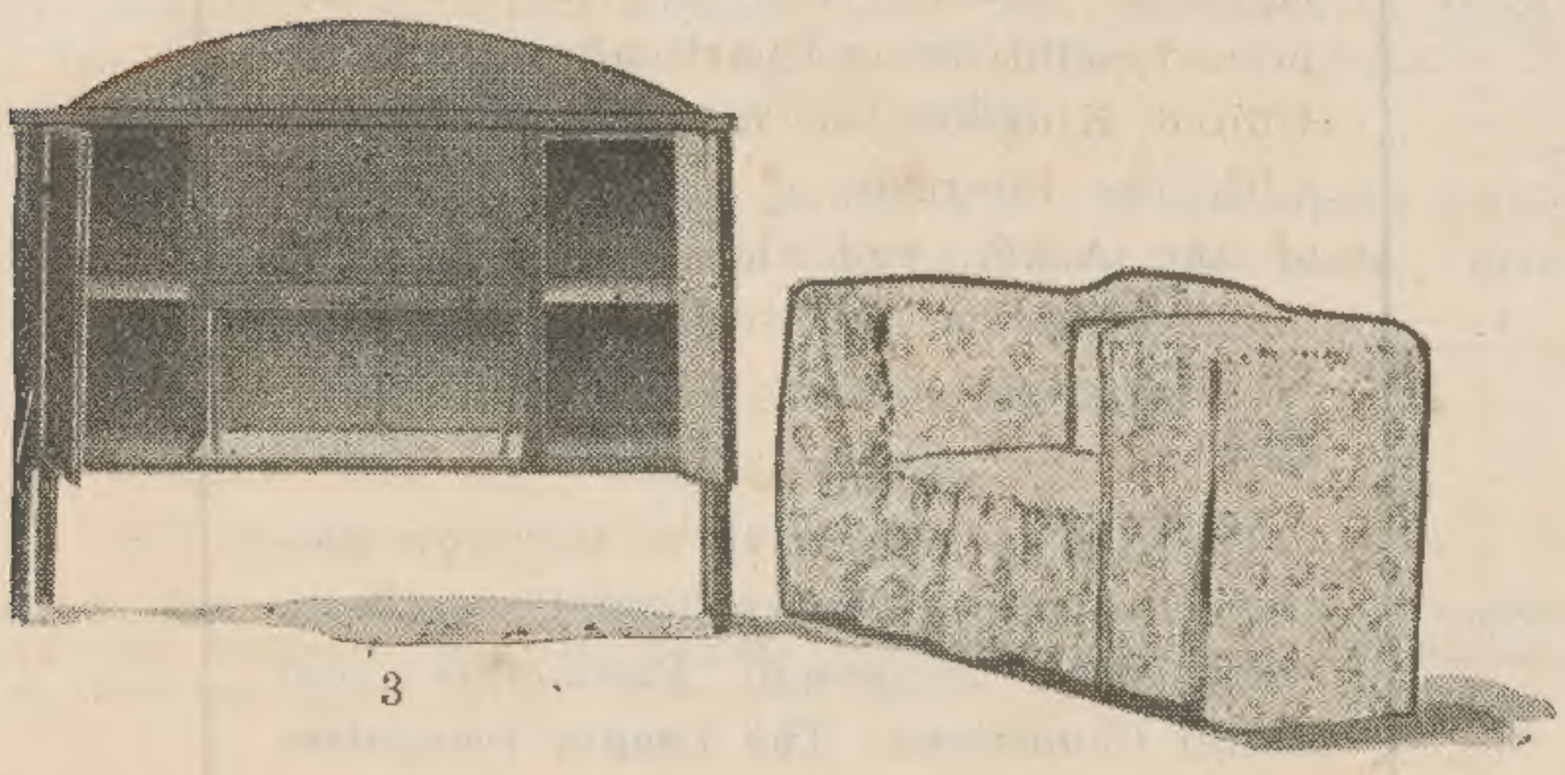
RURAL DEVELOPMENT BOOKLETS—2

MAKESHIFTS

And

OTHER HOME-MADE FURNITURE AND UTENSILS



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ENLARGED EDITION

NEW SETTLERS LEAGUE OF AUSTRALIA
(Victorian Division)
6A ELIZABETH STREET, MELBOURNE

MARCH 1925

The New Settlers League of Australia

which is representative of the principal Welfare and Progressive Societies, is functioning as a voluntary auxiliary, co-operating with Commonwealth and State Departments in the introduction into Australia of selected new settlers from approved countries, and particularly from the United Kingdom, so far as is consistent with the interests of returned members of the A.I.F., and the maintenance of sound industrial and social conditions for all Australian workers and their dependants.

The General Objective of the New Settlers League is More Population, Closer Settlement, Increased Production and Better Conditions. The League recognises that immigration, to be successful, must proceed side by side with a vigorous development of industry, both primary and secondary, and the adoption of more attractive conditions of rural life.

Addresses of State Divisions on page 72.

INTRODUCTION

"Always be content with what you have, but never be satisfied with yourself unless you are making the most of what you have."

This is the cheerful philosophy of a farmer's wife who made a useful contribution to the first Makeshifts Competition, which was conducted in 1923 by the "Farmers' Advocate" newspaper (now "The Countryman") on behalf of the Victorian Division of the New Settlers League.

"Anyone who starts a home on a simple scale like this (she adds) will get great happiness out of her home. So many nowadays start off with practically everything they require, and they don't get nearly so much pleasure out of it as those who have to build up their homes bit by bit."

The competition brought 1050 ideas—many of them, however, repeated frequently—and the Makeshifts booklet which was published in March, 1924, embodied the best of the designs. All the furniture and utensils described were actually in use in settlers' homes in Victoria.

The contributions were judged by members of the Household Advice Committee of the New Settlers League, and the "Farmers' Advocate" prizes were awarded as follows:—

FIRST: Mrs. Frank Hillman, Hillend, via Moe.

SECOND: Mrs. Amy Furze, Echuca P.O.

THIRD: Miss F. Rowe, Scott's Creek.

Special Mention: Miss Annie Duggan, Trafalgar; Miss Mary Brodie, Trentham East; Miss M. Hawkins, Dalyston; Miss M. McNabb, Baringhup West; Mrs. H. Harrison, Sale; Mrs. W. G. Paynter, Carag Carag; Miss Jean Spence, Murraydale; Miss May Phillips, Nandaly.

Some of the designs were used to furnish a cottage erected for the League at the Royal Agricultural Show, Melbourne, in September, 1923. The purpose was to demonstrate the small outlay required by the new settler and his wife in the early days of struggle and difficult financing when first setting up house outback.

A second competition was conducted late in 1924, and many additional ideas and designs of practical value are added in the present enlarged edition, which the popularity of the booklet in all parts of Australia has made possible. The two principal prizewinners in the second competition were Mrs. Frank Hillman and Miss L. Rowe.

It is not claimed that the booklet is in any sense complete. This applies more particularly to the Farm and Children's Sections. On Australian farms, necessity has proved to be the mother of invention, and it will contiuue to be so. The booklet merely suggests the directions in which the ingenuity of the settler and his wife may be applied.

The New Settlers League will welcome further Makeshift ideas and designs.

ARCHD. GILCHRIST,
General Secretary.

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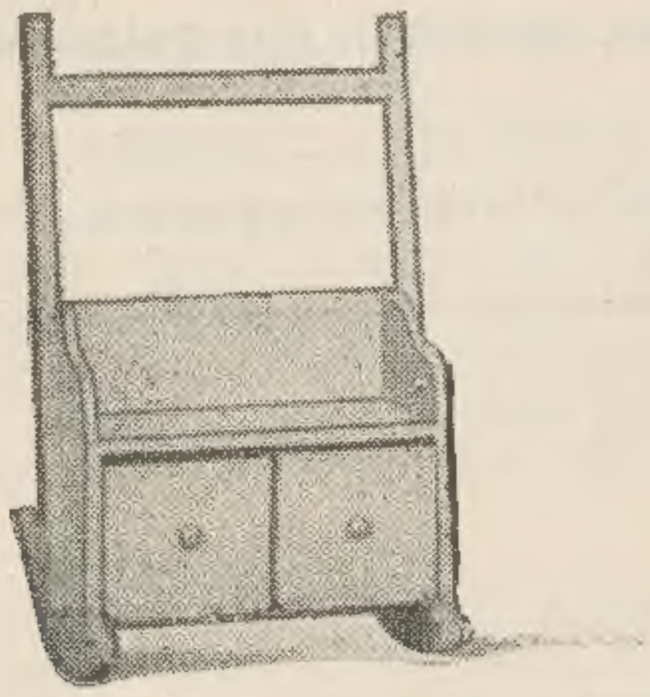

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THE NEW SETTLERS LEAGUE

Victorian Division

PRINCIPAL COMMITTEES:

Welcome and Welfare.
Big Brother Movement.
Migration of Women.
Household Advice.
Country Progress Movement.
Land Settlement.
Housing.
Publicity.

PUBLICATIONS:

Rural Victoria: a Handbook for New Settlers.
(One Shilling, post free).
(Free to New Arrivals).

Makeshifts and other Home-made Furniture.
(One Shilling, post free).

Share Farming in Principle and Practice
(Sixpence, post free).

Youth the Invaluable Factor in Migration
(Free).

Other Publications nearing completion.

MAKESHIFTS

SITTING ROOM.

SIDEBOARDS.

1. PATTERN A.—A piano case may be used as a sideboard. Take out the front boards from the upper slope of the case and set them in to form the top of the sideboard. With the addition of a couple of hinges, a door may be made. This is an admirable storehouse for provisions, as the mice cannot get inside it.

2. PATTERN B.—Eight kerosene boxes nailed together in two layers, papered inside and stained outside, with a dyed hessian curtain in front, make a good substitute for a sideboard.

3. PATTERN C.—(Illustrated.) Four kerosene boxes are screwed together, as shown in the centre design on the title page, and legs 1 ft. high are attached. Shelves are fixed in the boxes, and doors hung at the outer sides. The two centre boxes, lying on their sides have doors that drop down. Cord or leather attached to the upper middle edge and to the middle of the doors prevent the doors from dropping further than at right angles. The doors could be of lining board or scraps of timber. Cotton reels plugged and a little piece added make the door knobs. To the top back is added two flooring or lining boards, the top one being curved.

DINNER WAGGON.

4. A dinner waggon may be made from pieces of timber. Build up the framework and then add wheels so that it may be easily moved. There are usually wheels about from old machinery.

CABINET.

5. (Illustrated.) Take five kerosene cases and fasten together; paper inside with brown paper. Make two wooden frames, same size exactly, one to be fastened to the front of the cases, the other to form a skeleton door. Stain brown and fasten the door on with hinges; also hook and loop as shown. To cover sides and top of cabinet take a piece of cretonne or dyed hessian, fasten on lowest edge of lowest box (with brass-headed nails preferably). Stretch tightly right over and down to the floor on other side, and nail. Fill in door (on inside) with same material.

Small wooden supports, or two large reels sawn in half, are an improvement.

MUSIC CABINET AND SEAT.

6. (Illustrated.) Open the narrow side of a kerosene case. Make a lid out of the boards. Put it back again on the case with extra strong leather hinges, and also a leather loop to hold the lid fast. The lid falls flat on the floor and closes upwards. Four strong cotton reels screwed on to the corners of the case raise it from the ground. Make a shelf inside the case and paint or stain it. Fit to the top a cushion finished off with braid and heavy tassels.

BOOKSHELVES.

7. PATTERN A.—Obtain three or four pieces of wood for shelves. Join these together by cotton reels threaded with wire, with five or six reels between each shelf. At the four corners of each shelf bore holes for the wire to pass through.

8. PATTERN B.—Use long boards, one above the other, supported by home-made brackets, and painted brown.

BOOKCASE.

9. (Illustrated.) For your bookcase use three kerosene cases or more, according to space and requirements. Place the cases lengthwise, one above the other, and fasten firmly together. Run battens four feet long up the four edges, leaving 18 in. at the bottom to form legs. These must be smooth and tapered toward the bottom. Finish all the edges with thin boards or moulding. Brace the legs across underneath the bottom case. Paint or stain a suitable color. Line the inside of the boxes with silver or cream water-waved wall paper.

BOOKCASE AND CUPBOARD.

10. (Illustrated.) The design shown was made from a packing case, 3 ft. x 2 ft. x 20 in. deep for the cupboard, and the upper case for the books measured 2 ft. square x 8 in. deep. A Morton's Bloater Paste case is the right size. Add two shelves to it. Line the inside of the cupboard with paper, and paint or stain all the rest of the woodwork.

WALL BOOKCASE AND CHEMICAL CUPBOARD.

11. Three cases fitted in between a chimney and wall, and enamelled or painted, make a handy medicine chest and bookcase, and take up no floor space.

BOOKCASE AND WRITING TABLE.

12. (Illustrated.) Stand two kerosene cases on end, about 20 in. apart. On top of each place a half kerosene box. Nail boards across these to form a table top. Place a 7 lb. Epsom Salts box at the back, in the middle. Stand another of these boxes on end at each side of the first, and if a fourth can be obtained, lay it above the first one. These four boxes form the pigeon holes. Place half a kerosene case lying flat on top of the Epsom Salts boxes. Stand two half kerosene cases on end at either side of the pigeon holes. Shelves may be added to these and to the kerosene cases below. Double doors made of the kerosene case lids would neaten the pigeon holes. Stain or paint the whole.

WRITING DESK.

13. PATTERN A.—(Illustrated.) A useful writing desk may be made from four kerosene boxes. Stand them upright in pairs, about eighteen inches apart, and put a shelf into each box, thus making four cupboards on either side. The two uppermost on each side may be fitted with wooden confectionery boxes, with knobs made of cotton reels cut in half and screwed on. Make the table top of a few case boards, 3 ft. long, and wide enough to cover the boxes. Smooth down the boards and cover them with a light oilcloth. Attach a moulding at the back and both ends of the table, to stand about one inch above the edge. Add eight strong cotton reels to the corners to lift the desk off the ground. Paint or stain the whole.

14. PATTERN B.—(Illustrated.) A kerosene case cut down as shown; also two tins cut down and put together with solder to form a drawer for papers. The upper part is also a fairly roomy receptacle. Cut a round hole on right hand side at top for ink bottle. An anchovy paste glass jar, with a saucepan lid knob screwed on to lid makes an excellent inkpot. Cut hole exact size for this. Hinges on to lid or desk may be of leather, with brass-headed nails. For holder for pens the lid of a small biscuit tin, nailed on beside the ink-stand, does very well. Paint, or sandpaper and stain, all the wood surface, and paint penholder and front of drawer.

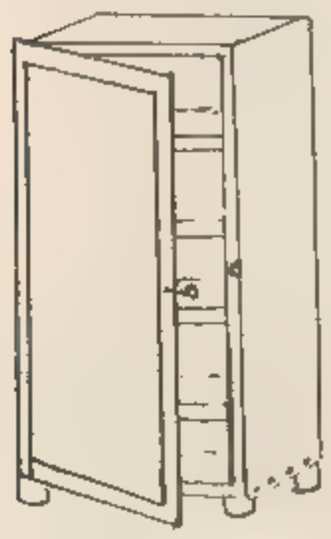
SET OF SMALL DRAWERS.

15. From match boxes and cardboard a handy chest of drawers for holding buttons, nibs, and other small articles may be made. Arrange twelve empty match boxes in two layers. Paste or glue together. Glue cardboard along the top, bottom and sides, leaving sides to project above the boxes. Round off these projections and add boot buttons for knobs to draw out boxes.

UMBRELLA STAND.

16. PATTERN A.—(Illustrated.) An umbrella stand may be made of black-wood or sawn timber. The legs are made from four pieces of timber measuring 2 ft. 3 in. x 2 in. x 2 in., and the cross pieces are made from eight lengths of timber measuring 12 in. x 1½ in. x ½ in. nailed to the inside of the legs. A tin plate or the lid of a 2 lb. tea tin is placed on the floor to catch the drips.

17. PATTERN B.—An umbrella stand may also be made by cutting down a case about 2 ft. high and 9 to 12 inches wide and deep, the end of the case being square. Leave the bottom in the case and mark off a frame 2 inches wide on the four sides. Saw out the centre, and paint or stain the frame.



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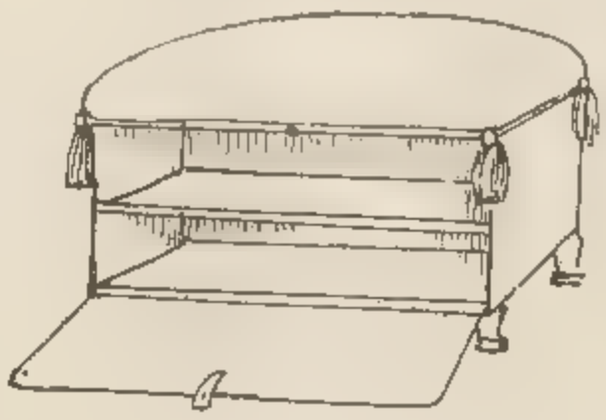

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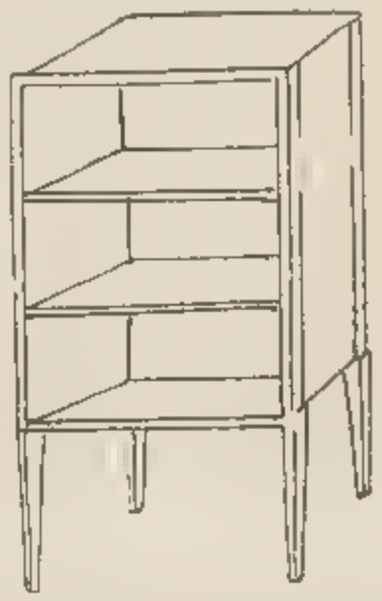

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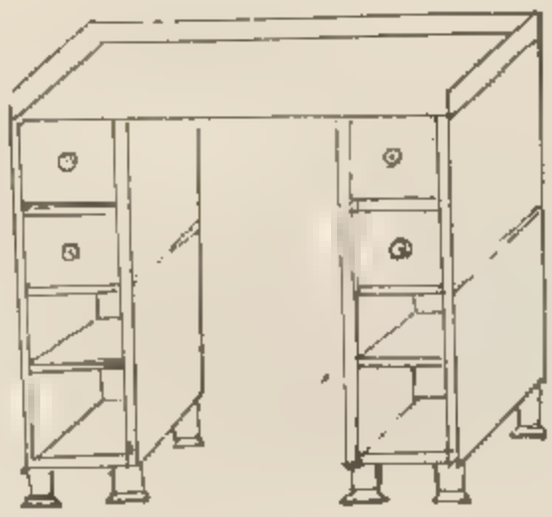

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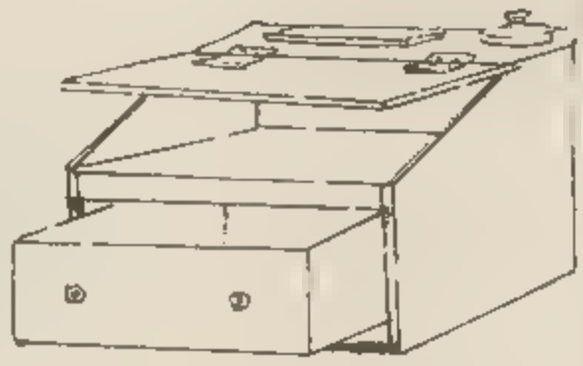

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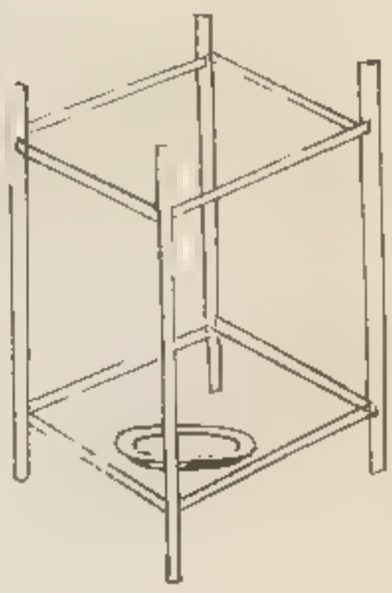

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TABLES.

18. PATTERN A.—Strong tables may be made from the cases in which galvanised iron is packed. Two are needed, one for the top, and the other to supply wood for the legs of the table. These cases are obtainable in different sizes, so one must be chosen to suit the room and the requirements of the housekeeper. Cover the top with linoleum or oil baize. Fibrous cement or plaster cases may also be used.

19. PATTERN B.—For a better table, buy four turned legs and add a top of pine wood.

20. PATTERN C.—If you are able to buy tables, get two of the same size. Leave one in the sitting room and the other in the bedroom for a work table. Then when occasion demands, they may be put together for a large dining table

21. PATTERN D.—To make a table of hardwood, obtain two pieces 3 ft. 6 in. x 3 in. x 1½ in. thick for the sides, two pieces 2 ft. 6 in. long and same width and thickness for the ends, and four pieces 2 ft. 6 in. x 3 in. x 2 in. for the legs. Plane down and finish with sandpaper or a fine wood rasp. Taper the legs toward the bottom. Make tenon joints to fit legs and frame together. Any kind of case boards will answer for the top. After smoothing all rough parts, take a plain lino., fasten all round the table top with smooth brass-headed tacks, and stain or paint the underframe and legs. By adding 6 in. all round, a larger kitchen table is obtained, and by reducing the width by 9 in. a side table is obtained. A strip of soft wood 4 in. wide could be run around the edge under the top of the table to give a better finish.

SMALL TABLES.

22. PATTERN A.—(Illustrated.) Take the end of a case and cut off the corners. Cut strips 2 ft. long and nail on for legs. Put cross pieces of these strips to join the legs, about one foot from the ground.

23. PATTERN B.—For an occasional table make a round top of flooring boards, or use the top of a barrel. Screw on three bamboo legs. Where they join, screw to each leg a small piece of wood and screw the free ends of the small pieces together.

24. PATTERN C.—(Illustrated.) A more pretentious table may be made of pieces of packing case.

25. PATTERN D.—(Illustrated.) To a kerosene case lying on its side, add four legs and an overlapping table top. Leave the case open, and it may be used to hold the afternoon tea things.

HINGE TABLE.

26. PATTERN A.—(Illustrated.) Take a sufficient length of lining boards 6 in. x ½ in. to make a table 5 ft. long. Make up into two parts. Run a cleat across the four ends and join the two together by hinges. This makes a folding table which may be placed on a small table, over a drop-head sewing machine, on a bed, or on two fruit cases on end. If put over a sink or bath it will act as a table for brushing clothes. When not in use it may be folded and put away.

27. PATTERN B.—A useful hinge table, which folds against the kitchen wall when not in use, is made from the top of a packing case, smoothed with sandpaper and painted. The board is hinged to the wall, and two legs are made at the free corners. When the table is not in use, it is dropped against the wall and the legs fold in against the board.

POT PLANT TABLE.

28. Make a frame from lengths of hardwood 3 in. x 1½ in. Have four pieces 3 ft. 6 in. or 4 ft. long for the front and back, four pieces 16 in. long for the sides, and four pieces 3 ft. long for the legs. Make the front and back of the frame first by nailing one batten level with the top of the legs, and the other 6 in. lower. Join up with the side pieces similarly placed. The frame will then measure 4 ft. 3 in. x 19 in. wide. Make a top of case boards so that it laps 1½ in. over the edges of the frame. Cover the top completely with kerosene tins flattened out, allowing an extension of tin over the side to turn up as a trough to run off waste water into a bucket or drain. Take a little off the back legs to give the table top a slight slope.

PALM STAND.

29. Use a butter box for the top of the palm stand. Nail lengths of 2 in. x 2 in. timber to each corner and continue them down for the legs. Brace the legs with 2 in. x 1 in. battens, and fit a batten to the top and bottom of the box on four sides to form a panelling. Stain and varnish.

FLOWER PEDESTAL.

30. (Illustrated.) To make a flower pedestal, knock a case to pieces, take the ends, cut one into a circle about 9 in. in diameter for bottom shelf, and the other into a circle about 6 in. in diameter for the top. Saw the sides of the box into strips 2 in. wide. Splice two of these together for each of the three legs, and nail the legs to the shelves.

COUCHES AND LOUNGES.

31. PATTERN A.—(Illustrated.) Seven kerosene boxes are screwed together as shown in the diagram. The inner divisions are removed so as to make one big space, and the floor of the couch is strengthened by two flooring boards nailed underneath. Another flooring board is nailed across the top, toward the back of the couch, and to this a lid made of two flooring boards is hinged.

Another piece of board may be added to form the head. Make a thick cushion to cover the boxes, and a bolster for the head. Six rubber castors should be placed under the couch.

32. PATTERN B.—(Illustrated.) Take a long, low, fairly narrow box—a windmill box is excellent—and attach a lid with leather hinges (a piece of old boot will do). Add an upright arm to each end. Pad the arms on the inside, make a bolster cushion and a petticoat of gay cretonne for the box, and there you have a handy lounge, which, in addition to being a seat, will hold all the family linen.

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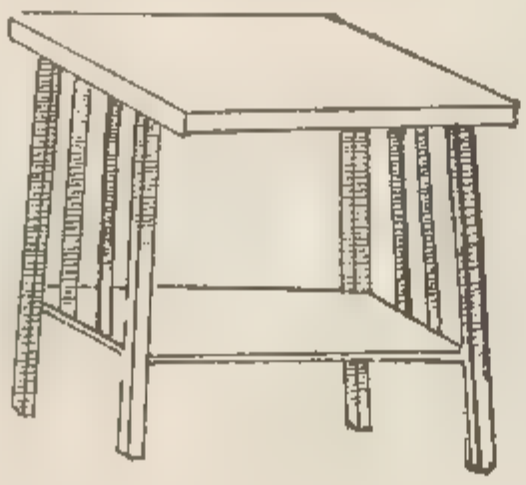

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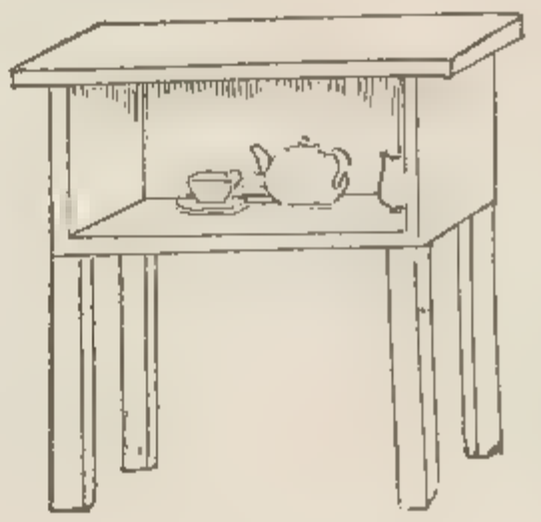

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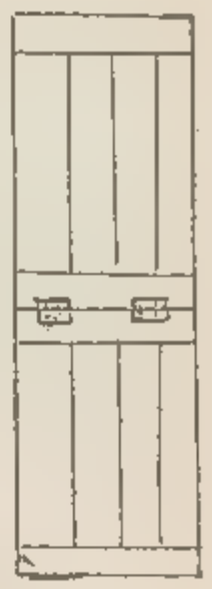

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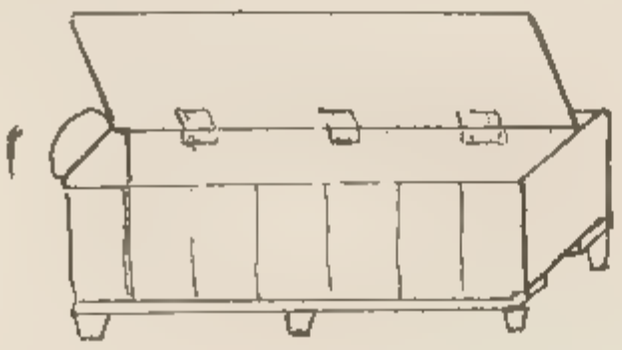

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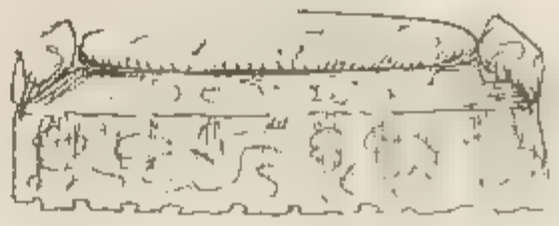

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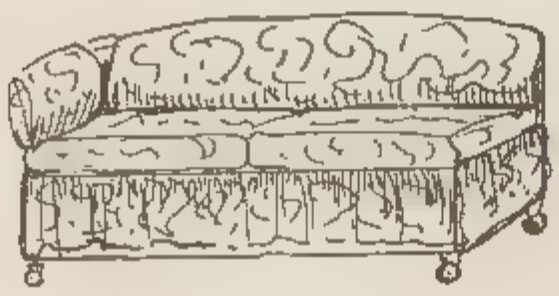

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33. PATTERN C.—(Illustrated.) Join two gin cases end to end. Use pieces of 2in. x 1 in. wood to form the back and arm rest at one end. Cut pieces of bag to fit the back and the arm, and cover them with straw sewn firmly on to form a cushion. Tack these on to the framework of the back and arm rest, and draw covers of cretonne over. Make the covers open at one end so that they may be taken off to wash. Make a squab to match, and put a frill around the cases. Castors may be added to the corners.

34. PATTERN D.—(Illustrated.) Make a frame 6 ft. long, 2 ft. wide, of ordinary 3 in. x 2 in. hardwood, with legs 16 in. long, tenoned to fit the corners neatly. Build a platform top of four lining boards 6 ft. x 6 in. Make a squab composed of stout hessian dipped in a bucket of dye, made from 1½ oz. of permanganate of potash. The hessian should be in two strips, each 6 ft. x 2 ft., with a narrow strip 3 in. wide joining them at the ends and sides. Leave one end open for filling, and make all seams double to strengthen. Soft grass packing or seaweed, usually found in packing cases, makes a good filling. With a packing needle and lengths of binder twine, lace down the squab at regular intervals. Make a cover of any strong material to fit the squab, and arrange a drape of same material in box pleats around the frame.

35. PATTERN E.—A wire stretcher, 2 ft. 6 in. long, may be used. Remove the head, foot and leg pieces, and substitute stout legs, made of 3 in. x 3 in. timber. Make a mattress as above. Have four big, soft cushions at the back against the wall.

36. PATTERN F.—A sofa may be made as follows:—Each end is formed of two pieces of wood, 3 in. x 2 in., and about 3½ ft. long, crossed and joined

by nuts and bolts. The sides are made of pieces of wood about five feet long, joined with nuts to the ends. Sacks are tacked firmly from side to side, and a padding is made from bags joined to the required length and filled with cocky chaff or clean straw. Cushions for the end may be made from empty sugar bags, stuffed in the same way. The sofa and cushions might have a bright cretonne cover. Instead of using sacks for the mattress, cyclone netting may be fastened securely to the sides and ends.

BEDROOM SEATS.

37. PATTERN A.—(Illustrated.) Use three kerosene cases, one sideways and the other two on end, as shown on the front cover and on the title page. Nail them firmly together and run a light rail along the full length of the cases at the back. Have the three cases open in front, and slip light shelves into the two end cases. Line the inside of the boxes with wall paper. Stain the outside to harmonise with the rest of the furniture. Make a squab to fit the lower seat, and drape the front openings with pretty curtains. Make a heading of braid or material, and pin into position with smooth brass-headed tacks. Block and raise the four corners two inches from the ground. This seat may be used as a receptacle for boots and shoes, and as a handy seat when dressing. Or the cupboards may be used for books and papers, and the seat when sewing or reading. It is also a useful seat for a mother when bathing the baby, and the necessaries for the baby may be kept inside.

38. PATTERN B.—(Illustrated.) A butter box may be used for a bedroom seat. Put hinges on the lid and pad and cover it. The sides are also covered. This is useful both as a seat and as a cupboard.

WINDOW SEATS.

39. PATTERN A.—(Illustrated.) A handy window seat may be made with two kerosene cases fastened end to end, after removing the front side from each. Run a thin lath along the top and bottom edges, back and front. Make a squab to fit the seat, and a hood to cover the squab and drape around the boxes. If eyelet holes to correspond are made at each corner, the drape may be kept in place by four square headed fancy upholstering tacks, pushed through the holes. A permanent cover may be made of substantial material, finished off with upholstering braid and round brass-headed tacks in each fold of the drape. Another method is to pipe the seams and slightly gather the drape on, securing it at the corners as described above. If the bottoms of the kerosene cases are left in, a good cupboard is also provided.

40. PATTERN B.—(Illustrated.) Place lengthwise a long case, measuring about 3 ft. x 18 in. x 18 in. deep. Put a shelf in for books and paper, and add two pieces of board to the back, as shown. Screw these to the corners. Pad and cover the back and the seat, and drape the front with brown linen or cretonne.

ROCKER.

41. (Illustrated.) Take a kerosene case, and fasten two strong pieces of wood to it at either end, and at the angle shown. They should be fastened to the case with very strong screws, or bolts, but not projecting inside, or the tins would not run. Connect the two side bars with another strong piece of wood. Cut wooden rockers and fasten underneath. Make strong cretonne cover for back, with one seam down at back, as shown, so as to slip on and off. Cushion of same material. This seat is a very comfortable one without the rockers, and a useful one for a mother to sit in to bath a baby. The baby's clothes and bath necessaries may be kept in the tins. Paint white, including front of tins. (See also the illustration on page 5.)

CHAIRS AND SEATS.

42. PATTERN A.—(Illustrated.) From a cement cask or crockery barrel a comfortable arm chair may be made by sawing off part of the top, and dropping the lid to form a seat about eighteen inches from the bottom. Instead of using the lid as a seat, holes may be cut in the side of the barrel, and wire threaded through to form a seat.

The sides may be given a fancy cut if preferred, as shown in 42b.

43. PATTERN B.—Another method is to cut the barrel in half. Turn one half upside down and rest the other half barrel on it. Cushions must be made for the back and seat of the chair, and tacked into position. The whole of the back and front may then be covered with hessian or cretonne.

44. PATTERN C.—(Illustrated.) A divan chair is made from a kerosene case turned on its side, with castors fixed to the corners. The sides and top are padded and a cushion placed corner-wise on top.

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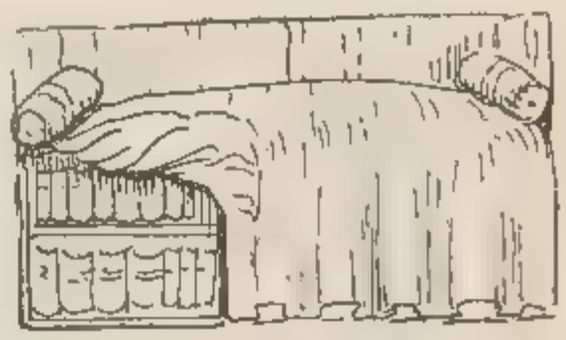
No. 39



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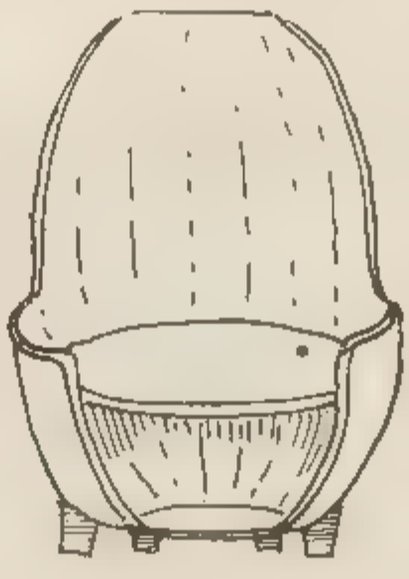

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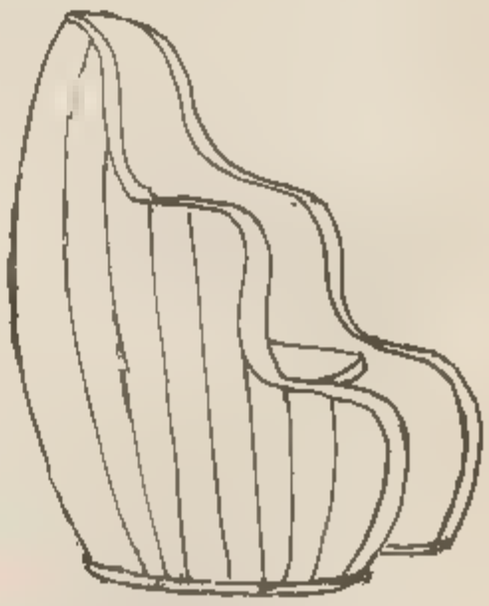

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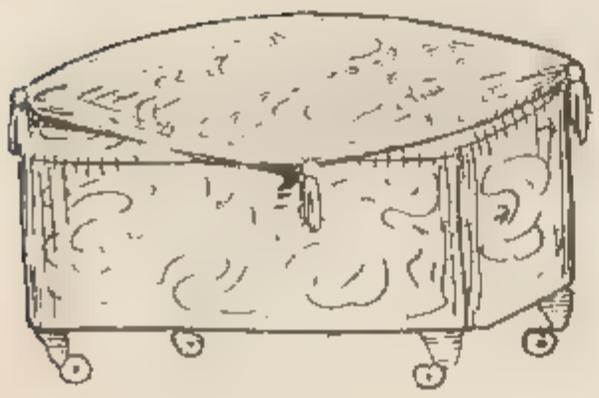

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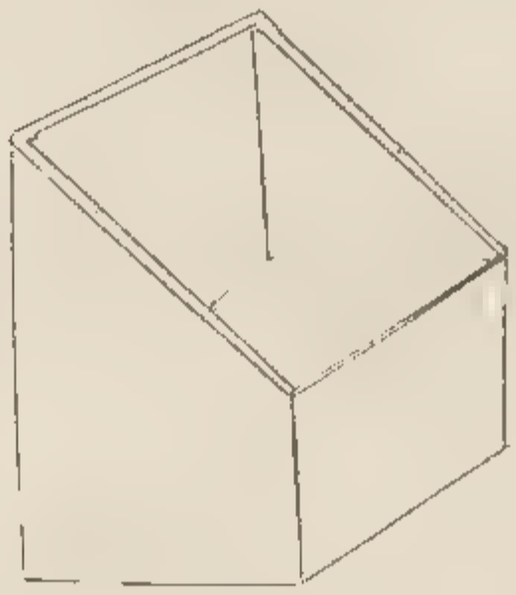

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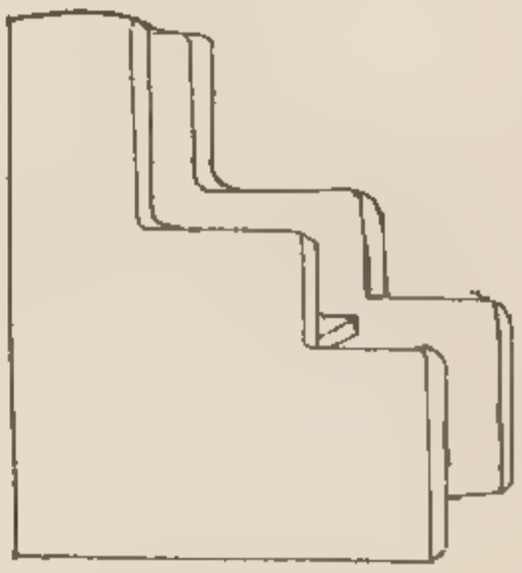

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45. PATTERN D.—A kerosene case turned upside down may be made into a comfortable seat by the addition of a cushion stuffed with horsehair, and covered with hessian fringed at both ends. If preferred, the case may be padded on top, and covered with cretonne, a frill of cretonne being added as a finish.

46. PATTERN E.—(Illustrated.) Stand a packing case on end. Find the middle and cut from it to the top on both sides as shown in diagram. Put a seat in, fitting it across the middle. Paint or varnish all over, and add a cushion.

47. PATTERN F.—(Illustrated.) Or from a case measuring about 3 ft. 6 in. x 2 ft. x 2 ft., saw out pieces as shown in diagram to form back and arm rests. Nail narrow bits of wood to the inside to form a rest for seat boards. Stain and pad.

48. PATTERN G.—(Illustrated.) Use a strong case. A gin case is good. Leave in the top and bottom, but remove one side. Put two pieces of 2 in. x 1 in. wood along each end at the bottom, and fasten four castors to them. Soft wood, ½ in. x 2 in., makes the supports for back and arms. They reach the whole depth of the box to give added strength. Paint all the woodwork and the inside of the box also. Cut pieces of bag to fit back and arms, and cover with straw, sewn firmly on to form a cushion. Tack these pieces into the frame of back and sides. Make cretonne covers as shown in the illustrations.

BACK.—Cut this on the double. Sew up with piping in the seams from x to x. Hem along edges 1, 2, 3, 4, 5, 6.

ARMS.—Cut on the double, one piece for each arm. Sew up along top and front. Hem sides 1, 2, 3, 4.

Drawing tacks might be used to fasten these covers to the seat of the chair. Finally make a cushion for the seat. Cut the cover double, with pieces 3 in. wide between the top and bottom and piped at the seams. The cushion might be buttoned with good effect. Put a frill of cretonne around the sides and front of chair. The space in the box serves to hold books and newspapers.

49. PATTERN H.—A sardine box makes a good foundation for a chair. Make the legs and back and arm rests with timber, and cover all except the legs with cretonne.

50. PATTERN I.—(Illustrated.) The sardine box may also be used as shown. The box forms the seat, and the rest is made entirely of wood, with the front of arms lower than the back. No covering is used, but a leather cushion may be added.

51. PATTERN J.—(Illustrated.) To make a strong chair, procure two pieces of wood 40 in. long and 3 in. thick. These form the front legs and the back of the chair. For the back legs, use two pieces of wood 20 in. long and 3 in. thick. The legs are slightly curved outwards at the bottom. Just underneath where the legs cross, nail a piece of board 15 in. x 6 in. to the front legs, cutting a notch 1½ in. each way at the two other corners for the back legs to rest on. For the sides of the seat use two pieces of wood measuring 13½ in. x 2 in. x 2½ in. thick; for the back a piece 16 in. x 2 in. x 1½ in., and for the front a piece an inch longer. Another board 18 in. long is placed across the top of the back of the chair. Mortise two holes in the front legs for the two side pieces to rest in and another two holes for the back legs to fit into. Also mortise two holes in the back upright for the back piece to fit into. Screw all joins to make them firm. Bore a hole in each back leg 3½ in. up from the bottom, but not right through the leg. Into these holes fit a round piece of wood 13½ in. long. Bits of pine boards may be used for the seat, and a piece of carpet tacked firmly on the back and seat will give a good finish.

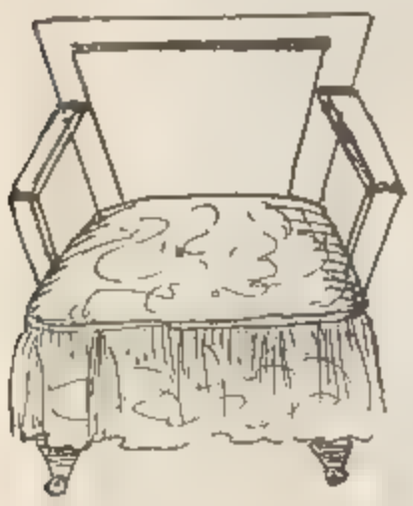
52. PATTERN K.—(Illustrated.) The back is two boards from the large side of a kerosene case, nailed or screwed to the two back legs, which are 3 ft. long. The front legs are 18 in. long. Two pieces of wood are let into the front and back legs, 18 in. from the base, and pieces of wood are nailed to them to form the seat. Stays are let into the legs.

53. PATTERN L.—(Illustrated.) Take a packing case of suitable size for a corner, and nail down the lid securely. The back of the seat is of boards, which reach the full length required, and which should be screwed securely to the sides of the box. Put four castors on the bottom. Next make three cretonne cushions and tack them on. Then cover the box part with cretonne and finish off with ornamental braid.

LOW CHAIRS (Children's).

54. PATTERN A.—(Illustrated.) Screw two kerosene boxes together, with the top one opened as shown. Add a cushion to the seat, and cover the whole in cretonne or hessian. The sides and back of interior are padded with cushions or rags.

55. PATTERN B.—(Illustrated.) Stand an open petrol box on one end, and lower the other end to the required height for the seat. If this is padded, it makes a comfortable chair. The petrol case may be turned on its side and fitted with a lid. It then acts both as a seat and as a cupboard for the child's small toys. Stain the case to match the furniture.



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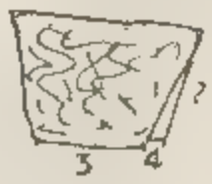
Back



Arms

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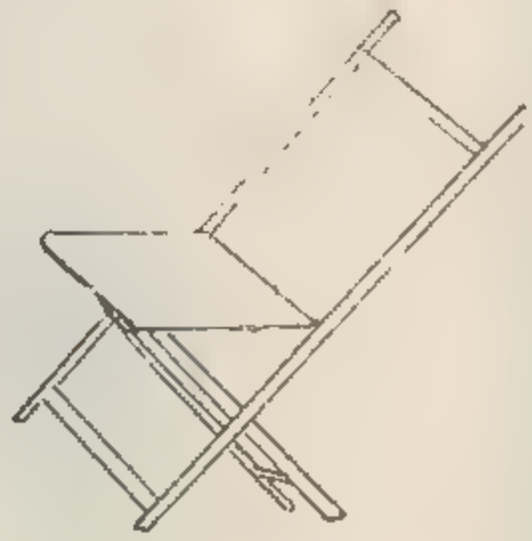

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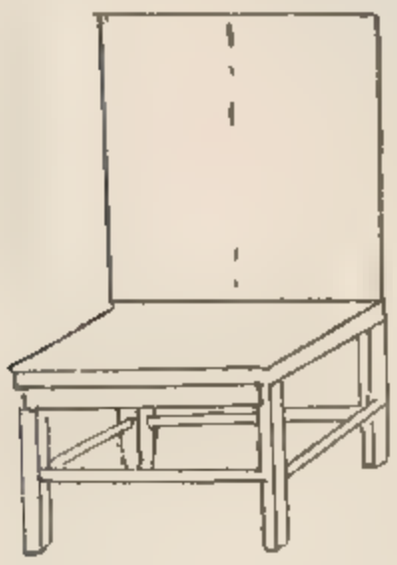

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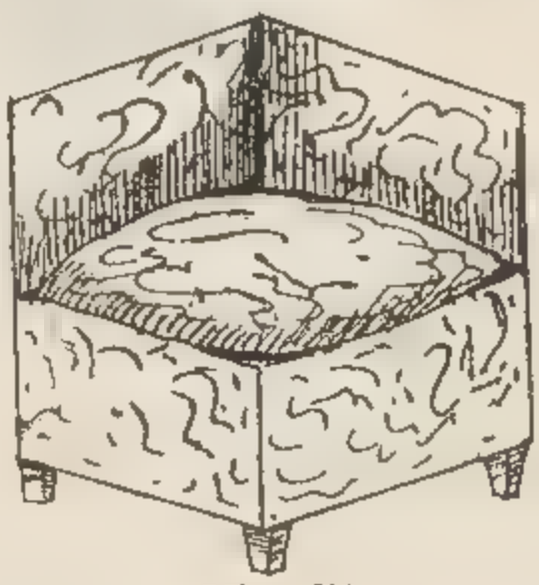

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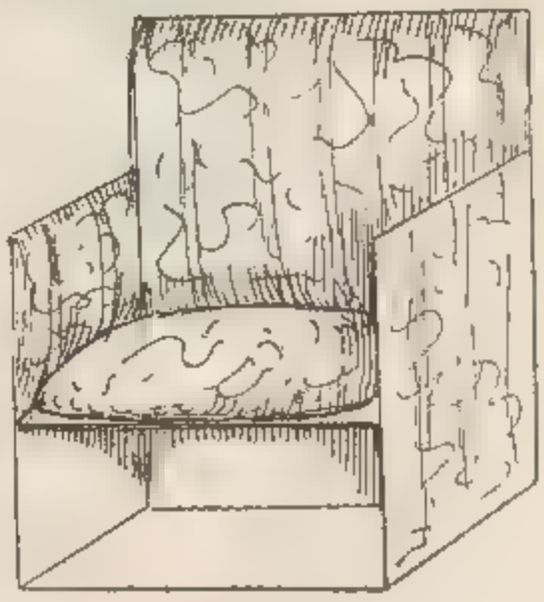

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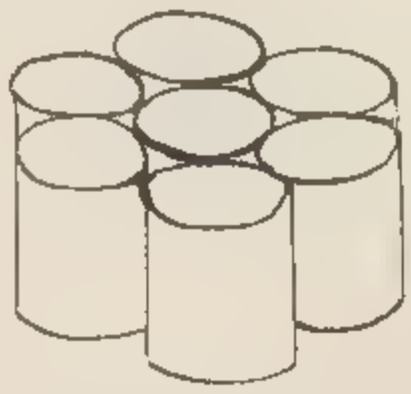

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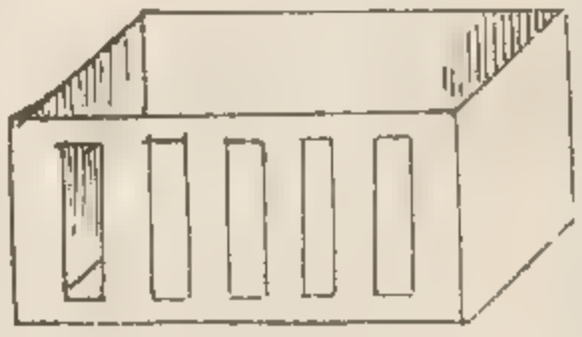

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DECK CHAIR.

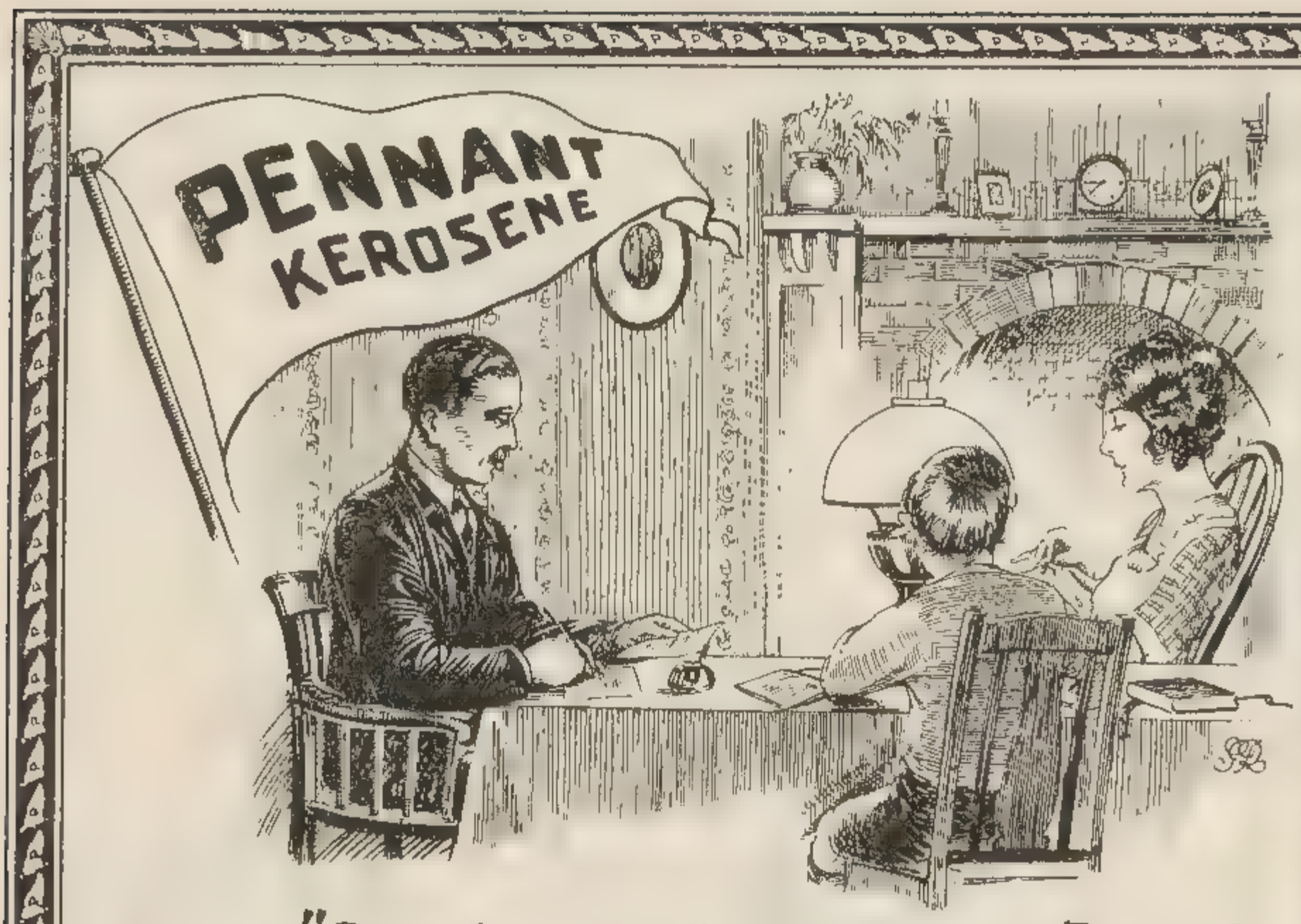
56. A deck chair may be made of pieces of timber bolted together, or in place of timber broom handles may be used. For coverings use sacks opened lengthwise and tacked to the frame. A rug may be thrown over the deck chair and cushions added.

FILLING FOR CUSHIONS, ETC.

57. Cut up rags and feathers for filling bed ticking or cushions. The feathers prevent the rags from becoming lumpy.

STOOLS OR FORMS.

58. A stool or form may be made with the ends of kerosene cases for legs and two pieces of softwood flooring for seat, with brace of 2 in. x 1 in. softwood underneath. An inverted V-shape piece may be taken out of each leg. Two narrow strips nailed to the sides of each stool will strengthen it.



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WHEN the lamp is "Pennant" filled there is no eyestrain to burden evening tasks.

There's neither glare, flicker, smoke nor smell from "Pennant," for in this new, improved kerosene "Shell" chemists have succeeded in eliminating all these unpleasant features.

PENNANT Kerosene is on sale at all Leading Stores,

THE BRITISH IMPERIAL OIL COMPANY LIMITED

Distributors of "Shell" Motor Spirit and Lubricating Oils

P 26A

FOOTSTOOLS.

59. PATTERN A.—Pad the top of a tobacco box and drape the four sides for a comfortable footstool.

60. PATTERN B.—(Illustrated.) Cover seven jam tins separately, then join six of them to form a round, with the seventh tin in the centre. See that they are sewn together very firmly. Put a padded top over the whole. Sew down tightly and finish with braid or cord.

61. PATTERN C.—A cartridge box makes a good footstool, as it is heavy and does not easily tip over. Pad the top and cover the sides plainly. Cover with the material the rope handles that you will find in the sides of the box, and they will be useful to move the stool about.

JARDINIERE.

62. A fruit tin, papered, covered in figured baize, or painted, makes a satisfactory jardiniere.

63. Kerosene tins may be cut into fancy shapes and painted.

64. Old saucepans, without handles, are also suggested for use as jardinieres, if they are enamelled and finished with gold paint.

VASES.

65. Any wide-necked bottles are suitable for vases. They may be covered with plaited raffia.

PICTURE RAILING.

66. A picture railing for hanging pictures may be made from any even round handles (such as broom handles) shaped at the ends and nailed to the uprights on the wall. They may be painted any color or papered.

A PICTURE FRAME.

67. A serviceable picture frame is made of strips of pine joined by brass-headed tacks and varnished.

THE FIREPLACE.

68. If you wish to have a red fireplace, use red ochre in the same way as whitewash. For a black or colored fireplace, paint over with two coats of paint and finish with a coat of enamel.

69. To whitewash your fireplace, use pipe clay, and when diluting add salt or skim milk to prevent the wash from coming off.

70. (Illustrated.) If it is necessary to use your fireplace after it has been whitened for the summer, put the fire in a kerosene tin, cut as shown, and stand the tin in the fireplace.

71. To make a stand for kettle and saucepans in an open fireplace, get your blacksmith to bend an old vehicle tire almost double.

THE FENDER.

72. Procure a stout iron tire from an old cart, and have it fashioned by the blacksmith to fit firmly and neatly around the hearth. Paint it and the hearth a color to match the room.

73. Another kerb may be made from a piece of hardwood, well sandpapered and stained, and ornamented with a few brass-headed tacks.

FLOOR STAINS.

74. Before staining a floor, fill up all cracks with a paste made of corn-flour and water. When this is dry, brush all dirt off and stain with strong Condy's crystals made by adding one teaspoonful of crystals to a pint of water. Leave for forty-eight hours and then stain again. When dry, rub over with linseed oil, and afterwards polish with beeswax and turpentine. It will need to be polished every week for a time, but after that, if kept rubbed with a fairly heavy home-made mop, it will keep in good order. If you do not wish to polish the floor, stain with Condy's crystals as above, and afterwards oil with kerosene to which a little burnt sienna has been added.

SAVING THE WALL.

75. If a door strikes the wall when swung back, fasten a cork to the wall where the door strikes. Use a small nail so as not to disfigure the wall.

TABLE COVERS.

76. Dyed hessian, hemstitched or fringed, and worked in silk or wool, may be made into good table covers. Art serge may also be used with a strip of cretonne 2in. wide added about 3 in. from the edge. For bedroom covers use unbleached sheeting worked in any way that taste suggests.

TO SAVE TABLE LINEN,

77. Spread a piece of white American cloth on the table at meal times. Keep an old broom handle to roll it up on after meals. With it may be used dinner mats made out of raffia or sugar bag buttonholed with colored cotton.

DYES.

78. A little red ink dissolved in cold water makes a pretty pink dye. A boiled onion skin makes an amber dye. Brown may be obtained by dissolving Condy's crystals. If red is liked, the rosene used for branding bags is cheap and effective.

MATS AND RUGS.

79. PATTERN A.—Take new grain bags. Open them along the seams and wash well. After dyeing the bags, make a fringe at the cut edges and fasten with sewing twine. Take a piece of the hoop iron that comes around the bales of bags and sew along each side of the bag to keep it firm. A stencil pattern may be painted in the centre or along the border. A stencil is easily made with two folds of brown paper pasted together.

80. PATTERN B.—Pretty mats for the floor may be made with hessian or old wheat bags opened out, and long strips of worn out clothes. (Obtain some patches from friends.) Legs of black cashmere stockings cut in strips are good to work in among the colors. Very pretty designs may be worked, and these should first be traced on the background. Cut the strips about ½ in. wide and thread into a sail needle. Work your design on the bag as you would work on canvas with threads of silk. If no design is used, make a mixture of colors, with the predominating color to match the room.

81. PATTERN C.—To make a mat from corn or flour bags, first cut a piece of bag the size the mat is to be when finished. Cut strips about two inches wide and fray the edges, leaving strands in the middle to stitch to the foundation. Cover the bag with these strips, then clip them even and dye to any color required. When dry, comb out, and the result will be a rug equal to a bought one.

82. PATTERN D.—Rag mats may be made from half a bag with small pieces of rag poked through and back again and bound around.

83. PATTERN E.—A washing rug is made by joining three or four thicknesses of hessian and fringeing with hessian well teased out at the end. Or the edges may be bound with a color.

84. PATTERN F.—A door mat may be made from used binder twine. Tie a number of pieces together and roll into a large ball. Use a coarse bone crochet needle. Make two chain and join. Then double crochet around and around, working all knots to the back of the mat. To keep the mat round and flat, double crochet into one stitch as often as required. This work will interest children very much. The mats, when finished, will look well and wear splendidly. They may be dyed.

85. PATTERN G.—A door mat of plaited binder twine is easy to make. Tie twelve lengths of twine together and plait in three strands, four lengths to each strand. When done, draw tightly together with twine or thread. Have all knots on the wrong side. Plaited stringy bark may also be used.

86. PATTERN H.—Sheepskins make good, warm mats. Soak the skins in a tub of wattle bark liquid for long enough to tan them.

87. PATTERN I.—Another method for treating the skins is as follows:—Cure the skin by first sprinkling the fleshy side with salt and wood ashes, and then rubbing daily with a brick. If a dry skin is used it will cure much quicker, but it should be washed over with warm water and saltpetre first. The skin may be dyed any color. Woolly skins are rather too expensive to use, but shorn skins will do quite well.

TABLE MATS.

88. Clean an old felt hat and cut it into round or oval table mats. Press these with a hot iron and damp cloth and mark scallops around the edge with oil paints.

A fine straw hat may also be used in the same way, the edges being bound with a color.

FLY RESTS.

89. From corner to corner of all rooms stretch white tape, and catch it up on a hook in the centre of the ceiling. The flies rest on the tape and thus the ceiling is kept clean.

FLY-PROOF WINDOWS.

90. A double layer of strong net tacked to the frame of windows inside will make them fly-proof. Use drawing tacks in preference to ordinary tacks, as they may easily be taken out when the net is to be washed. If fly-wire can be bought by the yard and nailed outside the window frame, it serves the purpose better.

BEDROOMS.

WARDROBES.

91. PATTERN A.—(Illustrated.) Arrange twelve kerosene boxes in two layers, a short distance apart. Join the two layers across the top by boards, and into these put hanging screws. Put another board across the back and put pegs in this. Hang curtains across the front. The kerosene cases are placed on their sides so as to be convenient for holding the household linen, hats, and underclothing.

92. PATTERN B.—(Illustrated.) Nail five butter boxes one on top of the other, and get two pieces of 13 in. x 1 in. shelving timber, using one piece 4 ft. 6 in. long, and fix as in sketch. Screw two pieces of 3 ft. x 1 ft. oregon on to both sides at the back to make the wardrobe firm. The top may be relieved by a piece of 3-ply. Use a piece of conduit or old pipe as a curtain rod. Stained or varnished, this makeshift is an ornamental and clean wardrobe.

93. PATTERN C.—(Illustrated). A wardrobe may be made with a large packing case and two petrol cases stood along the top of it for storing clothes. Insert a piece of piping or a round stick inside the case to hold coat hangers. Hooks may be put in the back for holding dresses. Across the front, arrange a curtain, with a stiff board or stick to keep it firm.

94. PATTERN D.—(Illustrated.) Another wardrobe is made from a drapery case, 6 ft. long, standing upright, and kerosene cases on their sides, nailed to the side of the drapery case. Add curtains.

95. PATTERN E.—(Illustrated.) Lay a case on its side, the case being about 3 ft. 8 in. long, to make the width of the wardrobe. Above it rest another case, 40 in. high, standing upright, and four kerosene cases lying flat. Put panels at the top and bottom and at the sides, and also between the two upper sets and along the top of the lower case. From the four lids, make a door for the kerosene cases, joining the lids by battens. Use the lid of the large upper case for a door also. The lower case has a drop-door hinged to the floor of the wardrobe. Secure the cases behind with strips of timber. Paper the inside and stain or enamel the outside.

96. PATTERN F.—A skeleton wardrobe may be made of flooring boards 6 ft. long. Use three boards for each side and pieces of cases for the top. Hang a curtain across the front.

97. PATTERN G.—(Illustrated.) Put shelves in the corner of the room, one about 18 in. from the floor, the other at about 6 ft. 6 in. from the floor. A piece of wood 4 in. wide goes from top to bottom shelf on either side against the walls, and another piece goes down the centre. To these, door frames of softwood moulding two inches wide may be attached. Fill in the door frame with cretonne. Add hooks to the wall and to the underneath side of the top shelf to hang the clothes on.

Two such corner wardrobes, in the second bedroom, one made with several shelves, would serve to hold the household linen.

98. PATTERN H.—(Illustrated.) Another corner wardrobe may be made by putting the bottom shelf up high enough for skirts to be hung from it. Screw some hooks into this shelf and put pegs into the board that it rests on. A narrow board fixed to the wall lower down with nails would be handy for hanging little things on. Put in the top shelf so that there is enough space between the two shelves for hat boxes. Have separate drapes for the two sections.

BAG WARDROBE.

99. Hang an S-hook on the wall; put dresses on home-made coat hangers, and hang them to the S-hook. Make large calico or cretonne bags with draw strings to fit over the dresses. Put the bags over the dresses and hangers, and draw up tightly to keep the dust out.

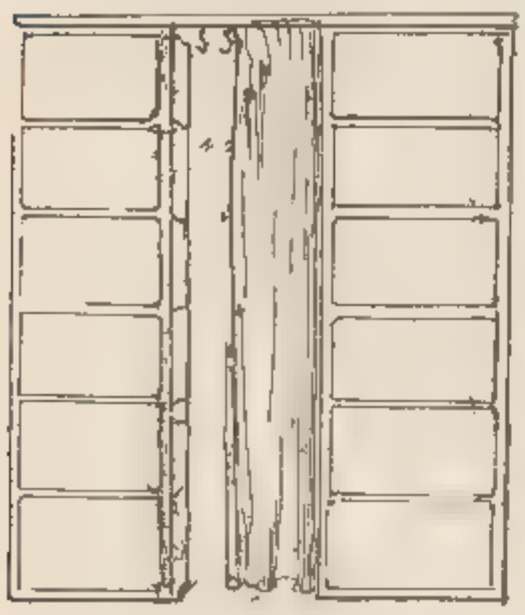
HATBOXES.

100. If you have a large iron trunk, make a cushion to fit the top; add a frill, with elastic run through the top, around the sides of the trunk, and you have a receptacle for your hats.

101. Cover cardboard hatboxes with cretonne or pretty wall paper, and you will improve their appearance.

LINEN PRESS.

102. PATTERN A.—Take two groups of kerosene cases, three on each side, the cases standing on their ends, and about 3 ft. 6 in. space between the groups. This gives a width of about 5 ft. and a height of 5 ft. 3 in. If the linen press be built near a well-lit window, the sewing machine might be kept in the centre space. A strong canvas bag may be tacked on the cases



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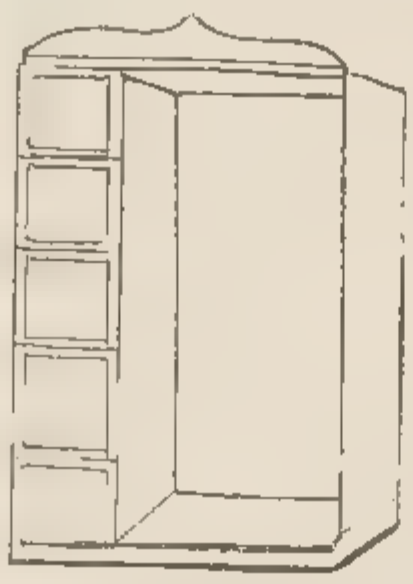

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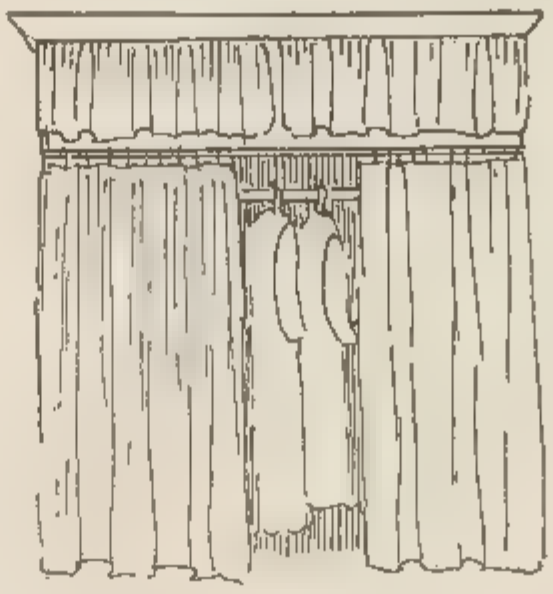

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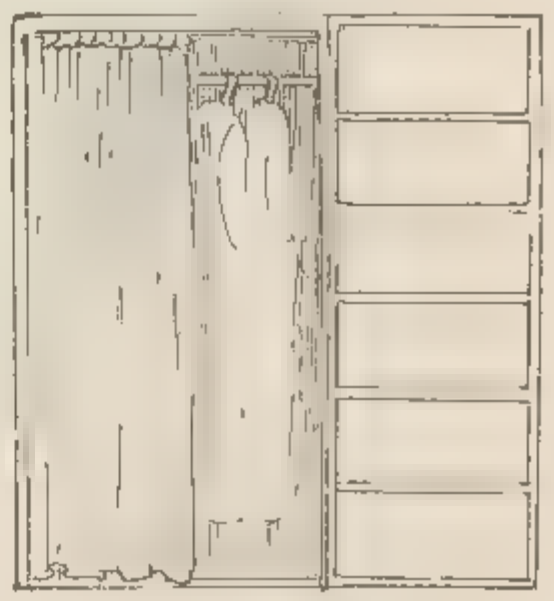

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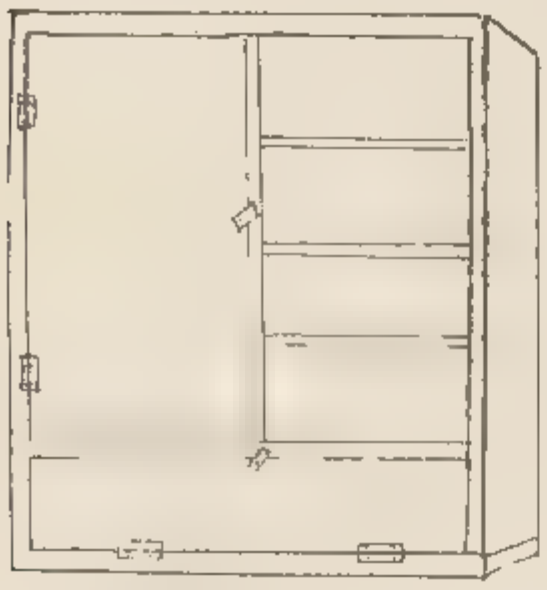

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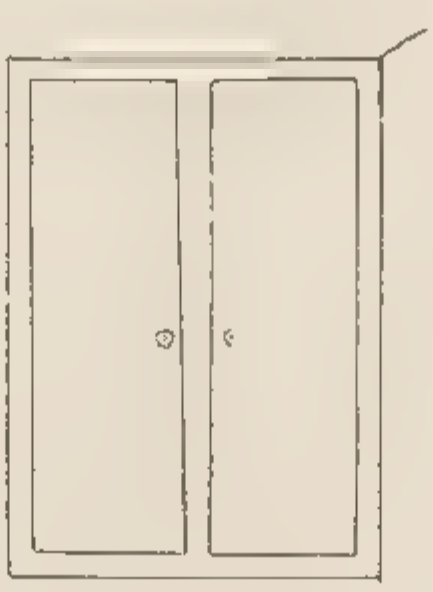

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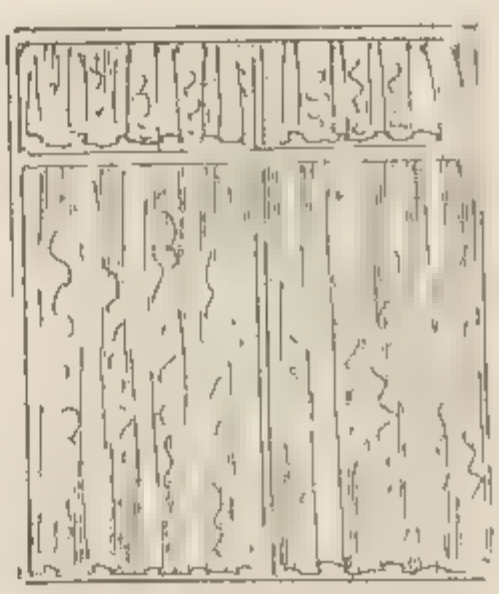


No. 98

to hold the stockings and mending material. The right-hand tier may be used to hold the household linen, and the other group might hold all garments requiring attention. A bamboo pole hung on two large picture hooks, one at each corner, will hold a curtain with rings or loops at each side.

103. PATTERN B.—Take as many kerosene cases as required, say six; lay them on their sides, and make a door the full height of the cases out of the lids joined together, using battens as in No. 95.

WASHSTANDS.

104. PATTERN A.—Place three kerosene cases on their sides, one above the other. Make a hole for basin in top box and cover the rest of it with oil baize. Hang a curtain across the front.

105. PATTERN B.—A washstand may be made from two fruit cases. Stand them on end about 17 in. apart and put a board 30 in. long across the top. Place a shelf in the centre between the cases. Put a curtain around and a white cover on top.

106. PATTERN C.—(Illustrated.) Take a practically square case and open one side. Over it place a table-top to extend for 1½ in. beyond the sides and front of the case. Place four square blocks under each corner to raise it off the floor. Run strips of smooth laths around both ends of the wash-

stand. If the case is 2 ft. 6 in. or more in height, place two shelves inside, leaving ample space for the toilet ware. Hang two small double doors on the front. Put a screw through a cotton reel and through a gimlet hole in the door to turn and lift a light latch made to drop inside and held in place by the top of a reel cut off close and screwed inside the other door like a button with a short shank. Stain or paint outside to match the rest of the furniture, and paint the inside or line with paper.

107. PATTERN D.—Use a large case for a washstand. Put short legs on it, cut a door in the side, and put a shelf inside. A rail may be nailed across the back to hold towels. Paint all white. A piece of baize behind the washstand keeps the wall from being splashed.

108. PATTERN E.—(Illustrated.) Use a long, narrow box, and put a shelf in it. Add two doors to close it, or put a drape across the front. Stain the woodwork. Have a shelf fixed to the wall above to hold soap dish, tooth brush, and other small articles. A piece of oilcloth tacked from the washstand to the shelf keeps the wall from being splashed. A thin, narrow board, the same length as the shelf, might stand on the shelf against the wall to protect the wall from discoloring.

109. PATTERN F.—(Illustrated.) Stand a kerosene box on end and put in a shelf. For legs use timber 3 in. x 1 in., the piece for the front legs being 31 in. long and for the back 34 in. Fix the box to the legs so that it stands a few inches off the ground. Fashion two pieces of timber for the side and add a piece of wood across the back. Paint and stain. Hang a curtain in front, or make a door.

110. PATTERN G.—With Medicine Chest. (Illustrated.) Join three kerosene cases together, as shown in the diagram, two on end and one flat across the top of the other two. Nail strips of wood at the back to keep them firm. Cover the top with oil baize and paint or stain the outside. A door may be made from the lids of the three cases. Join the lids by two panels of wood. The top case may be used to hold bedroom towels, and if the bottom cases have a shelf in each, one case may hold the toilet ware, and the other will be the family medicine chest. Hooks at the side hold the face cloths.

A large nugget tin, with a smaller perforated lid inside, makes a good soap dish.

111. PATTERN H.—With Chest of Drawers. (Illustrated.) Take three kerosene cases and six tins. Fasten the boxes together with corrugated steel wedges at the sides. Cut down four of the tins and put together in pairs, as shown, the cut-down sides overlapping and forming a double bottom. With a little soldering, two double drawers are thus formed. For the two top drawers the tins may be left intact, except that one side is cut out and the edges hammered down smooth. Put towel rails on each side, as shown, also small ledge around the top. Kettle knobs for handles. Paint all the woodwork white; also the fronts of the tins.

DRESSING TABLES.

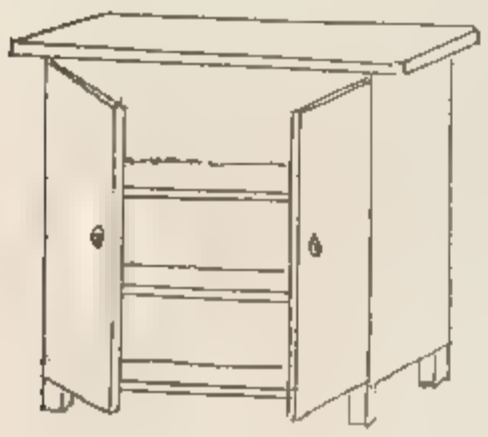
112. PATTERN A.—A dressing table is made from three kerosene cases by standing two on end, with the third lengthwise brought level at the top with the other two. Fasten the three firmly together, and run a batten up each corner, allowing 1 ft. of it for legs. Put narrow braces of wood across the back and the bottom of each case, also across the ends from leg to leg. Put a shelf in each side case. Place at each corner of the front two screw picture rings or hooks, into which may be fitted a brass window rod for draping. Doors on either side might take the place of the draping. Cover the outside with a light oak-grained paper put on with a good paste. Line the inside of the cases with wall paper.

113. PATTERN B.—Place two cases of equal size on end and about two feet apart. Connect them by boards nailed to the top of each to form a table top. The space between the boxes may be used to hold hat boxes or boots and shoes. The cases might have a shelf fixed in each and a door added. A curtain will then be needed only across the middle space. The doors may be fastened

by a piece of wood about 3 in. long, fairly thick, and slightly hollowed at each end. Run a screw through the centre of it on to the edge of the case. The wood will turn on the screw and keep the door shut.

Useful and pretty boxes for the dressing table may be made by covering various shaped cardboard boxes with bright paper.

114. PATTERN C.—(Illustrated.) Another dressing table may be made of a large packing case, two candle boxes or other light boxes, about 10 x 8 x 12 inches, and two cigar boxes, with extra wood for shelves and doors. Get four pieces of hardwood, 3 in. x 3 in., and about 4 in. long. Trim one end of each to form a neat leg, and add a castor. Fasten to the four corners of the case. Put in two or three shelves and make doors. A piece of moulding for frame fitted in with compo. board makes a light door. Place the two small boxes on top of case, with the covers made into doors, and on top of these again put the cigar boxes, also with doors on. Plane and sandpaper the whole and paint a light color. Glass knobs make a good finish. Buy a mirror that will fit in between the two sets of boxes, and hang it on the wall to fill this space.



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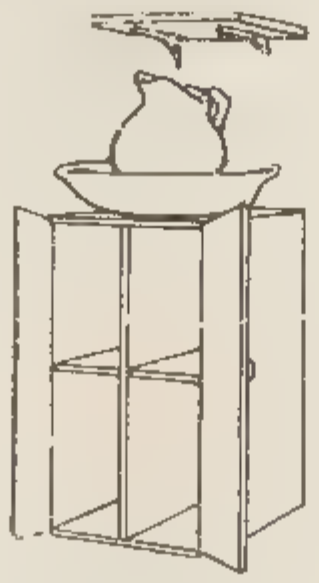

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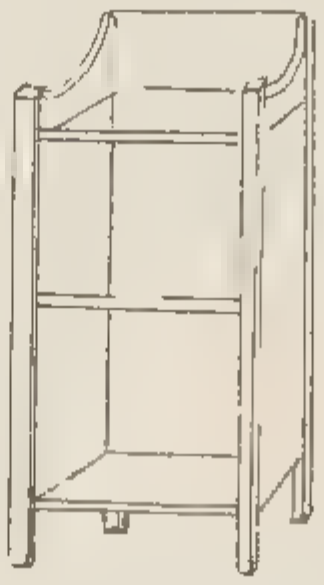

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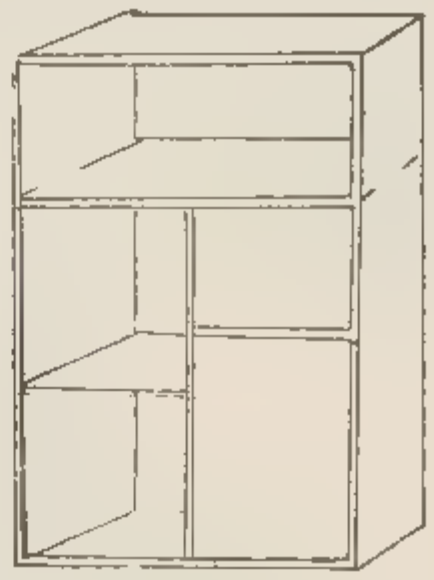

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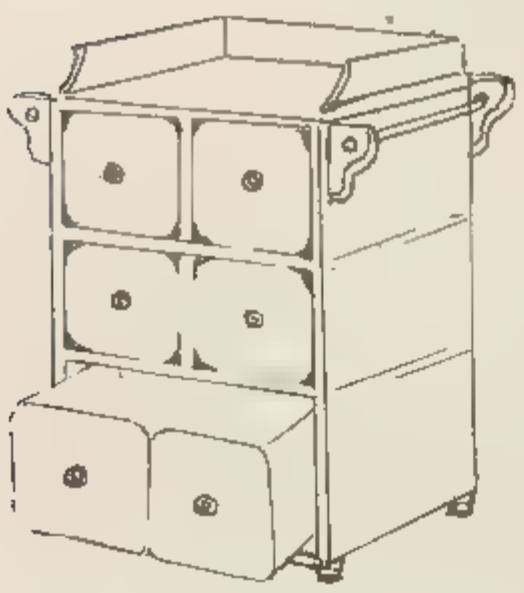

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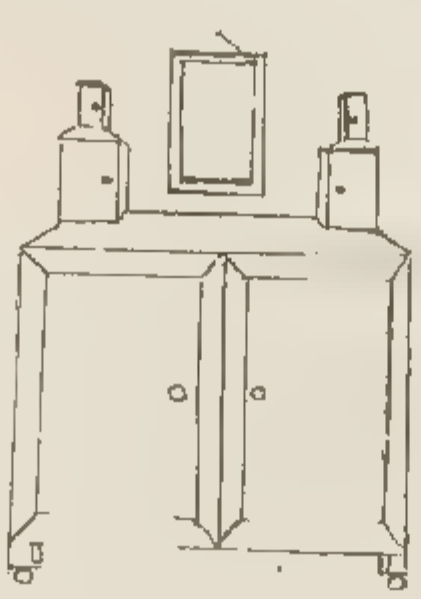

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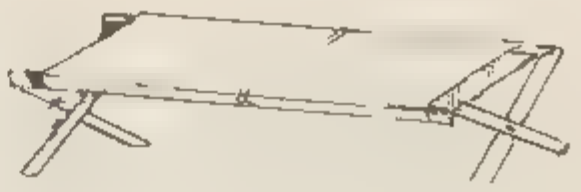


No. 120

115. PATTERN D.—A simple table is made by fixing four neat, firm legs to a long, deep box, with a narrow cavity space, the box lying on its side. Enamel the legs cream or white, and drape the box part with a pretty covering.

COMMODE.

116. Take a butter box, or one similar in size, and fasten a narrow ledge about an inch from the top inside the box. Make a lift up lid to rest on this, cutting a hole in the centre. Fasten a narrow frame on the four sides of the inside of the lid of the box and attach it to the box by hinges. Fasten four large cotton reels at the bottom corners. Cut down a kerosene tin, put a handle on it, and stand it inside the box. If the box is stained all over, and a cushion is laid on top, it makes a nice seat.

BEDS.

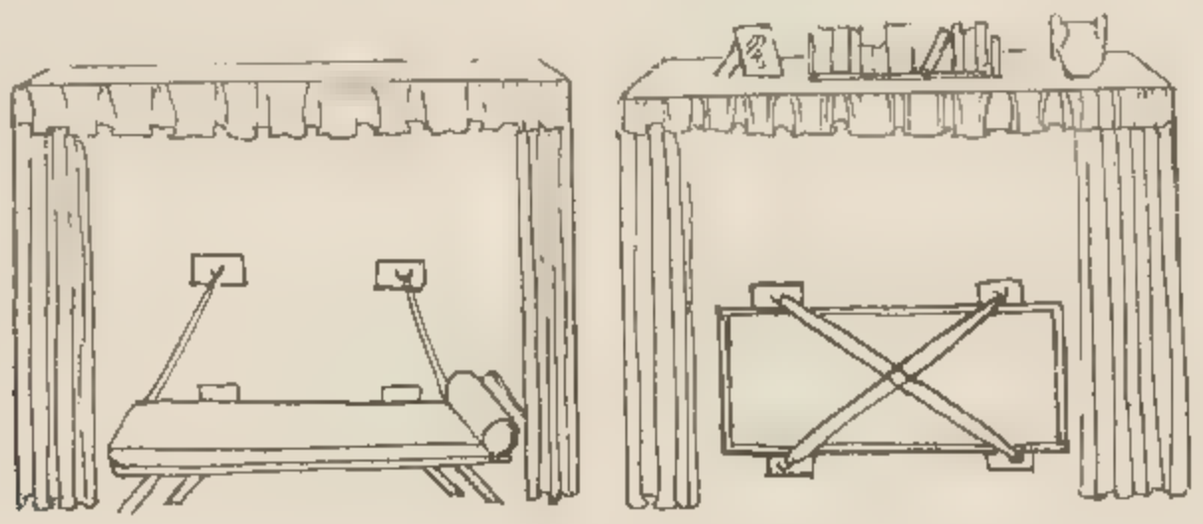
117. PATTERN A.—Procure two straight pine spars, 6 ft. long, and two 4 ft. 6 in. long. Mortise these together to form the frame of the bed. Next get four posts and cut them the height of the bed and fasten the frame securely to them. After boring holes the same distance apart in the frame, darn

No. 8 fencing wire through these holes to form the wire mattress. Next make a hessian bag the size of the bed, and fill it with clean straw. Place this on the bed and add a kapok mattress.

118. PATTERN B.—If a wire mattress can be bought, place it on top of the framework instead of using the fencing wire. Or the mattress may be placed on four kerosene boxes.

119. PATTERN C.—Get two pieces of 3 in. x 2 in. wood, about 6 ft. long, and two pieces 3 in. x 1 in. as wide as you want the bed. About 3 ft. or 3 ft. 6 in. is a good width. Cut the ends of the 3 in. x 2 in. for the cross pieces to fit level, then put a small bolt through. This may be tightened as needed. Put two layers of strong wire netting on this frame and make it neat with narrow strips of soft wood, so that there are no sharp edges to tear the bedclothes. Stand the frame on two boxes and secure it to them by a strapping of iron over the head and the foot rail on to the boxes. At one end a board may be nailed to support a pillow. The openings in the boxes may be turned outwards so as to serve as boot boxes.

120. PATTERN D.—(Illustrated.) Use sawn timber, 2 in. x 2 in. Make two pairs of legs 3 ft. 6 in. long, crossed, and fastened with a bolt. Cut two bed rails the length required for the stretcher, thread them through two new bran bags, and mortise rails and legs together.



a No. 121 b

HINGED WALL BED.

121. (Illustrated.) In small houses, beds often have to be made up in living rooms. Here is a suggestion for hiding the bed in the day time. Stand a folding wire stretcher in position on the floor against the wall. Put two wooden blocks 6 in. x 3 in. x 3 in. on the ends of the stretcher against the wall. Nail two corresponding blocks on the wall and hinge them to those on the bed. Now turn the stretcher up to the wall and mark where two high blocks are to be placed. Screw a cup hook into each of the four wall blocks. Two loops of picture or binding wire are slipped over the top hooks, and when the bed is made and turned up to the wall, these loops are pulled crosswise over the bed and slipped on to the lower cup hooks. The illustrations show the bed (a) ready for use, and (b) secured to the wall. A shelf 12 in. wide and 6 in. longer than the bed is placed above the folded bed, and curtains are run along the shelf to hide the bed. The shelf may be used for books or ornaments.

BEDDING.

122. All bedding may be made cheaply at home. It pays to buy the best linen ticking, as it will last a long time, and will stand washing. Before filling the ticking, take a piece of beeswax, heat a corner of it until it softens, and then rub over the inside of the ticking. It will only be necessary to heat the beeswax at the start as the friction will keep it soft. Fill with kapok, flock, home-made flock of clean cut-up rags, or clean chaff.

123. To prevent the wire mattress from rusting, paint it with aluminium paint, or protect the ticking by attaching a covering of hessian to the wire mattress.

EIDERDOWN QUILT.

124. PATTERN A.—A home-made eiderdown quilt may be made out of cretonne filled with kapok or cut up papers. Sew it across in long strips and cross again.

125. PATTERN B.—Another quilt may be made of feathers. Make a bag of strong material such as calico, and stuff with a thin layer of feathers. Then make another bag, the same as the first, of sateen or cretonne. Slip the first bag into it and stitch diagonally. The quilt might be made of old blankets instead of feathers.

126. PATTERN C.—A substitute for an eiderdown quilt is a rug made of patches of woollen tweed. These may be bought at most tailors' shops. Line with a pretty covering to match the room.

WHITE QUILT.

127. Quilts may be made of sheeting worked at the edges with mountmellick or a simple crochet design. A colored stitching may also be used, or a stencil design.

BED RUGS.

128. PATTERN A.—A warm rug may be made with five sugar bags. Open the bags and join four together. These form almost a square. Cut the fifth bag lengthwise and join the two pieces to the four bags. Cover both sides with colored patches, the more patches the prettier the rug will be. Featherstitch all seams with cheap colored wool.

129. PATTERN B.—Tack together with long stitches any old flannel shirts, singlets, socks, stockings, or old blankets to form a foundation of the required size. Tack on sheets of newspaper, or old paper patterns, and cover the whole, on both sides, with dark grey storm flannelette. Cretonne to match the furnishings of the room may also be used for the outside covering.

BLINDS.

130. Window blinds may be made from unbleached calico dyed dark green or brown. Leave a wide hem at the bottom through which a piece of wood may be run to roll the blind on. When the blind is rolled to the required height secure it with a paper clip or a clothes peg. A frill of calico may be added to the blind if it is fitted to a roller. Another finish is a border of crochet work, the cord also being crocheted.

WINDOW CURTAINS.

131. If floral cretonnes have been used for the furnishings of the room, choose plain curtains for the windows, as they will be a relief to the eye. White or cream voile, with a crocnet insertion, makes a soft curtain. Bordered voile lasts well. When the border fades out, boil the curtains, and tint them with a cold water dye. Poplin curtains save starching and are very strong. The best parts of worn herringbone sheets may be used, either dyed, or with a colored border added. White muslin curtains might have a border of hail spot muslin, the spots embroidered in colored silks, or a design of yellow or blue daisies worked on them.

132. Make the curtains to hang just as far as the sill. They may be secured by a narrow piece of painted wood run through the top hem and fixed to the window frame by nails first put through a cotton reel. If five loops of tapes are attached to the top of each curtain, a painted broom handle may be run through them and nailed to the window frame.

133. A valance adds to the appearance of a window. A piece of wood a little longer than the width of the window frame, about 6 in. wide, and thick enough to hold tacks, is required. Pleat a drape of the curtain material around it, securing with invisible tacks. Secure this to the upper edge of the window frame. Run a thin wire through the top of the curtains and fasten the wire to hooks underneath the wood, one at each end and one in the centre. By bringing the curtains beyond the side of the window, the effect of additional width is given.

134. Oatmeal bags, washed and boiled until all the color is out of them, and joined with insertion, make short curtains for small windows. They may be also cut into convenient sizes and hemmed to make children's handkerchiefs or lunch serviettes.

KITCHEN AND SCULLERY

DRESSERS AND CUPBOARDS.

135. PATTERN A.—(Illustrated.) Build up two tiers, each containing three kerosene cases standing on end, the narrow side facing the front, but closed. Make the opening in the outer side of the cases, as shown, and fit in shelves at convenient spaces, putting them closer as you get higher. Between the two tiers place six more cases, lying on their sides, in two sets of three, and opening to the front. These form a cupboard and table between the two tiers. Nail all firmly together, and make hinge doors to fit the cupboard. Fit shelves above the table and add cup hooks to them. Put thin strips of moulding up the sides and across all edges to disguise the cases. Fasten a piece of oilcloth on the table, and run a light curtain on a pole across the shelves. Hang curtains over the outer cupboards, which may be used for storing preserves. The whole of the dresser may be raised on wooden blocks about 3 in. high.

136. PATTERN B.—Take two kerosene cases and a larger box. Make a couple of shelves in the kerosene cases and stand them on end. On top of them place the case, which should be divided into shelves. A row of big nails put in near the top of it will make cup hooks if they are turned up a little. Cover the whole with curtains of dyed hessian, bordered with a piece of cretonne.

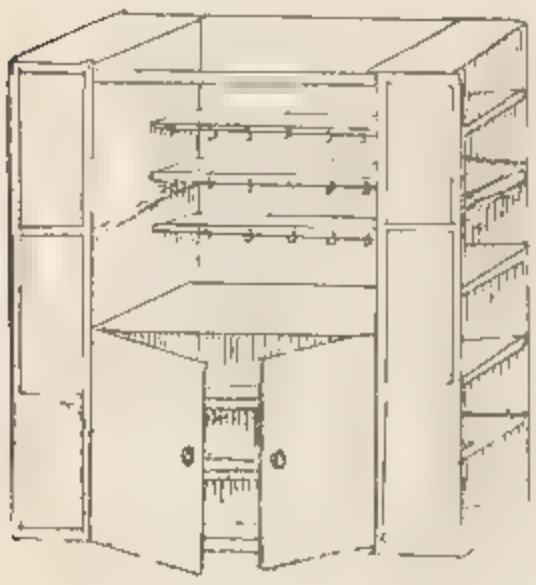
137. PATTERN C.—(Illustrated.) Four kerosene boxes are screwed together, as shown, and placed on legs 18 in. high. Two or four case-lid doors are screwed to the front. The back is made of ½ in. lining boards joined vertically, and the sides, top, and shelves are of ⅞ in. flooring boards. Hooks are added to the edge of the shelves, and, if liked, dyed hessian with threads drawn to make a pattern may be hung from the top.

138. PATTERN D.—Dresser made from two packing cases, the bottom one measuring about 4 ft. long, 3 ft. wide, 2 ft. deep. Paper inside with plain, white paper. Put two shelves inside, and two doors on the front. On top of this, place a slightly smaller case, paper inside and add two or three shelves. Hang two fly-wire doors on hinges to come down to the bottom shelf only. Screw cup hooks to the under part of this shelf and nail narrow strips of wood near the back for plate rests.

139. PATTERN E.—(Illustrated.) A culinary cupboard may be constructed from odd lengths of hardwood to fit into a convenient corner of the kitchen. Make the legs of 2 in. x 1 in. hardwood about 2 ft. 6 in. high, and the table top of case boards about 1 in. thick. Eight inches below, make a frame to form a box under the table top for towels and clean dusters. Stand four kerosene cases on end above the table, two at each end. Two kerosene boxes, as shown, may do as well. Fit shelves into them. Make two bars out of broom handles to reach between the cases. At regular intervals in the broom handles put nails on which to hang culinary articles. Make double doors and hang them with two pairs of T hinges. Two kerosene tins with one side cut out and the handles on the outside could be divided into compartments by four confectionery boxes for currants, raisins, spices, and essences, the tins being slipped into the cases. Under the table the wood box might be kept, with a piece of linoleum closing the front.

140. PATTERN F.—(Illustrated.) To make a useful cabinet for crockery and provisions, get two packing cases, 2 ft. high and same depth as a kerosene tin on the flat for the bottom cupboards. Two kerosene cases on the flat are placed on these to hold four kerosene tins, with one long side cut out. These tins pull out like drawers, and are covered by two lift up doors, made of lids of cases. Two more kerosene cases are placed flat, one on top of the other, in the centre of the two underneath, and a case on end is placed on either side. Add shelves where required. Join cases well at back and sides with strips of timber, and screw them together on the inside. Put strips of wood between the boxes and fasten the doors to them by small hinges.

141. PATTERN G.—(Illustrated.) A culinary chest may be made of four kerosene cases and four pieces of 2 in. x 1 in. hardwood. These pieces need to be the length of the four cases lying on their sides, with three spaces equal to the case width between them. Add a few inches for legs. Thus the pieces will reach the width of seven cases, with the length of the legs added. Lay two of the pieces on the floor and place the boxes on them, the first about 3 in. from the floor, the second the space of a box away, and so on. This gives seven spaces. In these, fit fourteen kerosene tins with a long side cut out and the handles outside. Punch holes in the sides of two tins and they will do to hold scones and bread. Other eatables may be stored in the remaining tins. Either solder the hole in the tin or fill it with a cork soaked in phenyle. The chest will then be mouse-proof. Paint white and write the names of contents on the tins.



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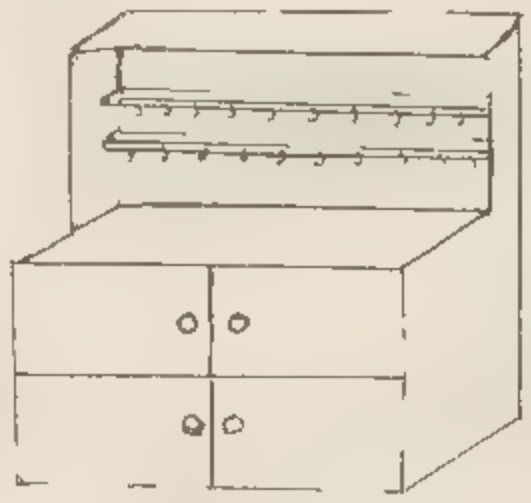

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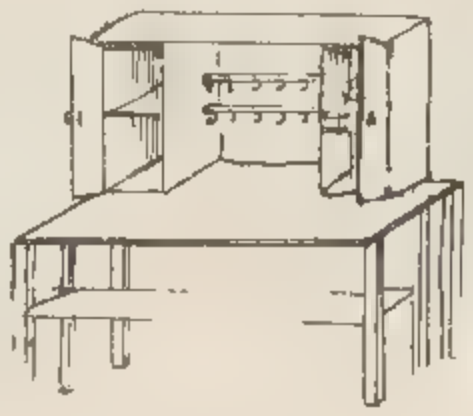

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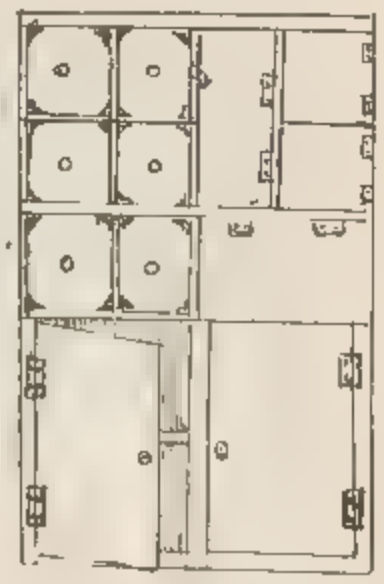

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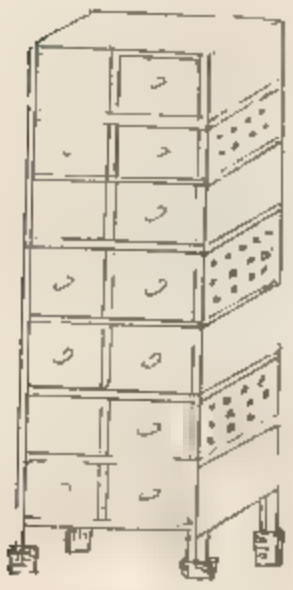

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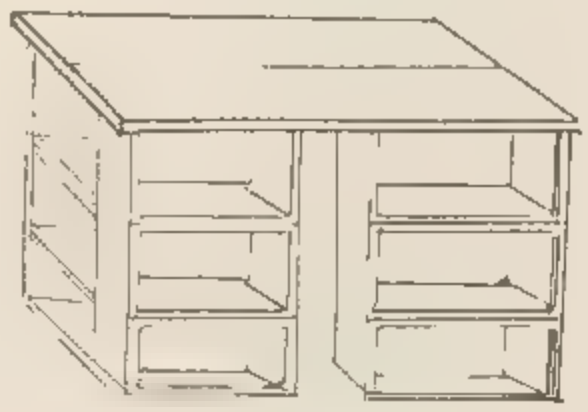

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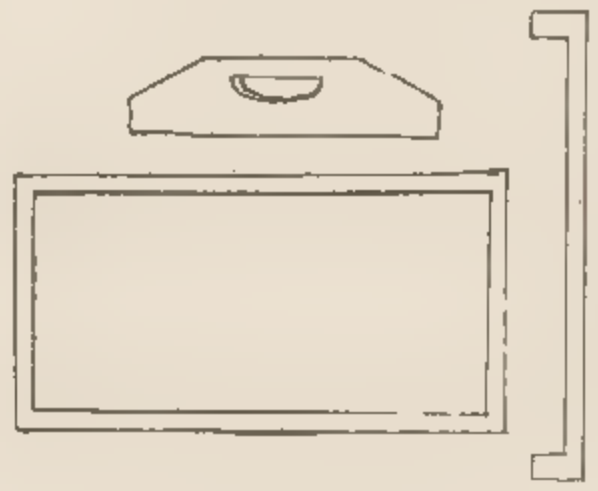

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KITCHEN TABLE.

142. (Illustrated.) Make a kitchen table of twelve kerosene boxes laid on their sides. Place six boxes in front in two tiers of three each, with a space of 18 in. between the tiers. Put three boxes on each side. Have all the openings in the box to the outside. Make the table top of two boards each 5 ft. long and 15 in. wide and place them so that they overlap the boxes by about 3 in. at front and sides. Place a cover of linoleum over the boards. Keep the kitchen stores and utensils in the twelve cases. A narrow strip of wood nailed across the bottom of each box will keep small goods from falling out.

TRAYS.

143. PATTERN A.—Cut a kerosene tin lengthwise with a very narrow edge, and leaving a piece at each end to roll for a handle.

144. PATTERN B.—A wooden tray may be made by cutting down a box and leaving an edge about 3 in. high. In the ends, holes may be cut for handles. Plane smooth, sandpaper, and stain or paint.

145. PATTERN C.—(Illustrated.) Use a side of a kerosene case for the bottom of the tray. Cut out sides and ends as shown, and nail securely together. Sandpaper and varnish.

KNIFE BOX.

146. (Illustrated.) A cutlery box may be made from a kerosene tin cut down and divided into two compartments by a wooden partition.

PLATE RACK.

147. Fasten two pegs, about 18 in. or 20 in. long, into the wall about 2 ft. over the sink. Put a layer of strong wire netting over these, and boards 2 in. deep along the sides and front. Plates and dishes may be drained on this into the sink before being put on wooden shelves above. A dozen strands of wire from the front of the drainer, fastened back to the wall at an angle, would keep the plates upright.

BREAD BOARD.

148. Take the end out of a kerosene box, round the corners, and cover with linoleum tacked at the edges.

BREAD BOX.

149. (Illustrated.) A kerosene case, with the tops cut off the two tins, and edges neatly turned over and hammered, and a wooden cover and handle as shown, is an excellent bread box.

PORRIDGE SPOON.

150. To save your spoons, use a piece of pine board, shaped like a bat, to stir the porridge.

APPLE CORER.

151. A wooden peg acts as an apple corer.

TONGS.

152. A strip of hoop iron bent almost double will do duty as a pair of tongs.

TOASTER.

153. (Illustrated.) Make your toaster of No. 10 fencing wire. Bend a piece to hold the bread, and to each end of it attach a twisted handle.

GRILLER.

154. A griller may be made from fencing wire bent into shape, and a handle added.

GRATER.

155. PATTERN A.—Make a grater from a piece of 24-gauge plain galvanised iron, with the edges turned over No. 8 wire, and a piece added for a handle. Punch holes with various sized nails to make graters for different purposes.

156. PATTERN B.—With a nail, punch a number of holes in the lid of a treacle tin.

CHOPPING BOARD.

157. Cut a piece of pine board either square or round, scrub well, bore a hole near the edge, and thread string through it to tie it up by.

COLANDER.

158. Punch holes in the sides and bottom of half a kerosene tin for a colander. For a smaller one put holes in a round tea-tin.

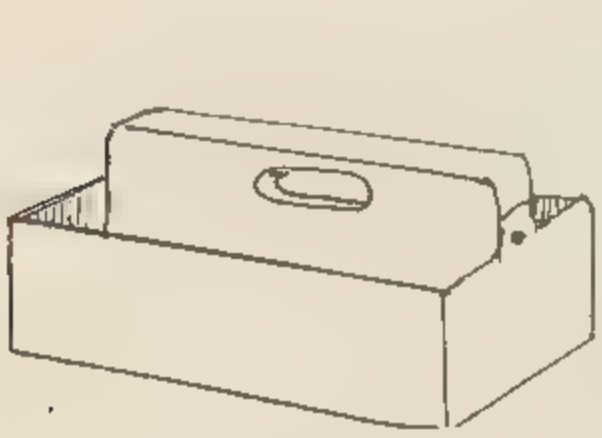
EGG-BEATER.

159. (Illustrated.) An egg-beater may be made of fencing wire, as shown. The two loops are caught at the top with wire. The handle is made of four pieces of wire with the end twisted around it.

WASH-UP DISH AND DRAINER.

160. PATTERN A.—(Illustrated.) Cut one side out of a kerosene tin, and turn the sharp edges over and hammer flat. The tin should be cut down to about two-thirds. Make a strainer—to fit inside the tin, about half an inch smaller all round—of fencing wire and rabbit netting of small mesh, with lifter at each end, as shown. Put it into the kerosene tin. Use a soap saver and hand mop to save the hands. When articles are washed, lift drainer out and stand on tin to drain as shown.

161. PATTERN B.—(Illustrated.) Cut a kerosene tin diagonally through one end, along the edge to the other end, and through it diagonally. Bend back the two parts thus formed till they stand firmly. Make a frame of 3 in. x 1 in. battens and nail it around the top of the tins. Put a broom handle across to lift by. The crockery may be washed in one side and drained in



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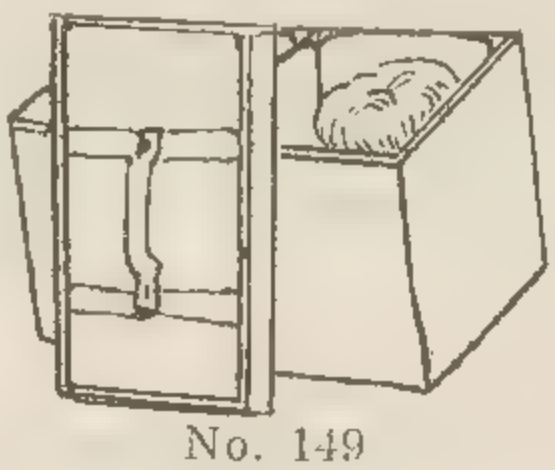

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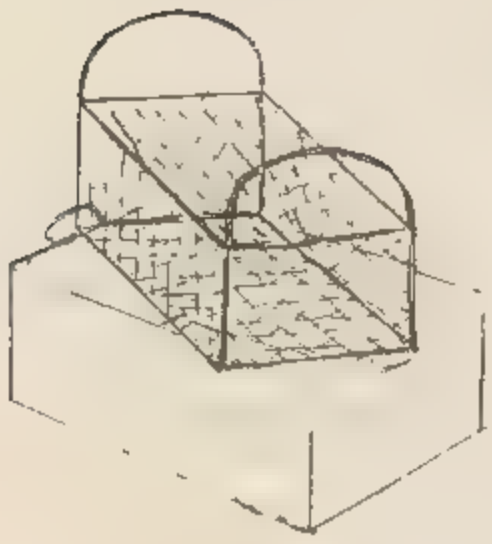

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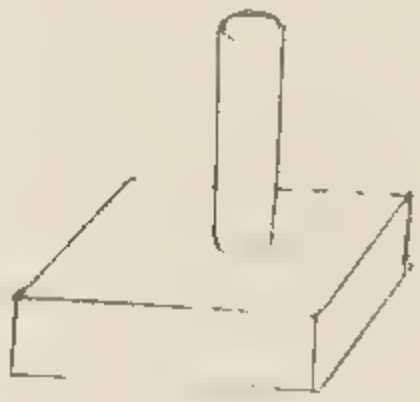

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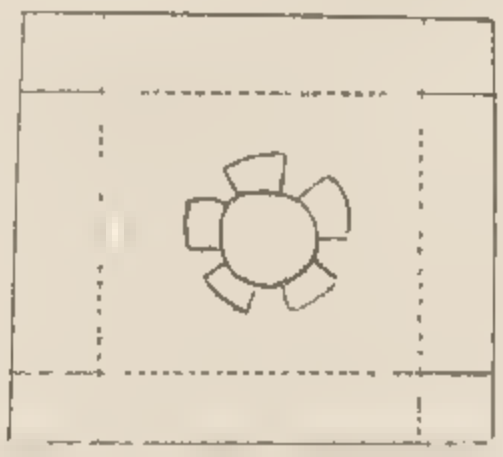

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the other. Or the potatoes may be peeled in one division and washed in the other. For an outside wash-bowl this type of makeshift is useful, as two people may wash at one time.

THE KITCHEN SINK.

162. A sink may be made from a packing case. If it is not high enough, add legs to the two front corners, bringing the legs to the top of the box for strength. Nail the case firmly to the wall at the back, and strengthen the legs with braces. Make a hole in the top of the case, and into this fit a kerosene tin with a long side cut out, and the edges turned over about two inches. Either nail these edges down on the top of the case or catch them underneath with a piece of board and bolts. Make a hole in the sink and plug it with a cork. The waste pipe could be made of pieces of kerosene tin, or there might be pieces of spouting over from the building of the house. Solder to the sink. A piece of zinc over from the flushing on the roof of the house might be put at the back of the sink to protect the wall. Give the inside of the tin two coats of enamel, and cover the table part with linoleum.

Fix a door to the front of the case and use the bottom of the case as a cupboard for pots and pans.

KITCHEN TOWEL.

163. To save the good towels, open up a sugar bag, cut it into two, and bind the edges. This makes two towels, which will become soft by boiling, and which may be used in the kitchen.

FOR SCOURING TABLES.

164. (Illustrated.) A strong, square piece of wood, about eight inches square, with a round wooden handle (a piece of broomstick would do) fixed in as shown. Tack sandpaper over the under side, the tacks coming up on the sides of the board. Even without sandpaper it is a great labor saver, and cleans boards beautifully. A piece of strong canvas may be used also in place of sandpaper.

KETTLE-HOLDER'S PLACE.

165. A contributor has a novel method of keeping the kettle-holder always in its place. All that is necessary is a length of strong string, a holder, small pulley, a screw-eye and a weight. Fasten the pulley to the centre of the mantelshelf or woodwork and place the screw-eye at the side. Run the cord through and attach the holder to the pulley end and the weight to the other end.

CANDLESTICKS.

166. PATTERN A.—To make a candlestick, a treacle tin lid, or a similar lid, and a block of pine wood 2 in. square are required. Set the lid on the block of wood and drive a tack through the centre. With 3½ in. nails form a ring to hold the candle. Drive the nails through the lid into the block. Paint any color desired.

167. PATTERN B.—(Illustrated.) Cut from a kerosene tin a square piece with a side measuring 5 in., and two strips, one 3½ in. x 1¼ in., the other 4 in. x 1 in. Make a round hole in the centre of the square piece; roll the first strip and insert it in the hole, after snipping one side at intervals of ⅝ in. to a depth of ¼ in. Hammer the snipped edges against the underpart of the square and solder if necessary. Bend the second strip over to form a handle and rivet it to one of the sides of the square. Turn up the edges of the candlestick to a depth of ⅝ in., first making four snips as shown. The illustration shows the back of the candlestick. Snip at the heavy lines; fold at the dotted lines. Fasten each corner with a rivet.

BUCKETS.

168. Use a kerosene tin, with the lid cut out, for a bucket. The handle may be a piece of broom handle fitting across, with a nail driven through the tin into each end of the handle.

169. Handles may also be made of hoop iron rivetted on, or of galvanised wire run through a bone or through old garden hose or other tubing.

170. To make a milk bucket, cut the tin off a little more than half way up. Turn edges neatly over a piece of wire, rounding the top as you do so.

SOME USES FOR KEROSENE TINS.

171. Kerosene tins may be put to an almost endless number of uses. With a few inches off the top and a handle added, they make good scrubbing buckets or slop pails. Cut in half lengthwise, they make meat roasters, bread or cake tins. With a long side cut off they make tins for setting milk, and if the other side is perforated they act as clothes drainers.

172. The whole tin does well for saving fat for soap-making, and makes a good mixing tin for calf, fowl, or pig feed. It may also be used for boiling meat or puddings.

ENDS OF KEROSENE TINS.

173. Scald the end of a kerosene tin and use it to put over the pan when frying. The stove is kept clean by this method.

174. Saucepan stands may be made by melting the handles off the kerosene-tin ends, which are then hammered flat.

175. To make a saucepan lid, cut a round of tin larger than required. Make small cuts around the edge and bend it over to fit the saucepan.

SOME USES FOR TREACLE AND OTHER TINS.

176. Large treacle tins may be used as egg boilers or milk jugs. If part of the side is cut out they may be made into large scoops, and, perforated, they become milk skimmers. If a handle is put on, the treacle tin serves as a lunch billy. A handle of kerosene tin rivetted to the side makes a dipper of it.

177. A dipper may be made from a 6-lb. jam tin slightly bent to form a spout. To make a handle, put a wire around the top and another around the bottom and twist a length from one to the other.

178. Save empty condensed milk tins. Solder strips of kerosene tin to them for handles, and children may use them as pannikins at picnics. They also make good measures for flour and sugar.

179. Lids of large tins may be used for sponges or jam tarts.

180. One-pound fresh herring tins make meat-pie dishes. One- and two-pound preserved meat tins make cake tins, while six-pound oblong preserved meat tins may be used for bread baking.

181. Smaller tins have their uses as food containers. If they are painted or stained, and the name of the contents is painted on them, they may be made to look very attractive.

182. A tongue tin makes a good strainer. Pierce fair-sized holes in it from the inside.

183. Mustard or other small tins, if pierced with holes, may be used as dredgers.

COOKERS AND STOVES.

FIRELESS COOKERS.

184. PATTERN A.—To make a fireless cooker from a butter box, first pack straw several inches deep in the bottom of the box. Brown paper may be torn into shreds and used with the straw. Pack all around the sides of the box with straw and brown paper, leaving a nest for the saucepan to fit into. Make a straw-stuffed cushion to rest on top and put on a tight-fitting lid and catch. If liked, the padding may be kept in place by a covering of non-conducting material, such as blanket or felt. Draw the covering lightly over the padding, which should slope toward the edges of the box, and tack it lightly around the edges. All food must be brought to boiling point before it is put in the cooker. If the cooker is made larger, it may be used to keep the dough warm overnight in the winter.

185. PATTERN B.—Mrs. John Booth, Hawthorn, Melbourne, writes: Fireless cookers have the advantage of being a most economical and wholesome way of cooking food. In the most simple form of home-made cooker, without the discs for use in roasting and boiling, only stews and soups and boiled foods can be cooked. Particulars are given here as to how to make both kinds of cooker; and both are, in comparison with other forms of cooking, simple and inexpensive. In the case of the cooker without discs, the food is put into the

cooker while rapidly boiling; in the other the discs are heated and put in with the food to be cooked; in both cookers, the food is cooked by a very slowly diminishing heat. The vessels, usually billies, in which the food is cooked, have no narrow necks or small corners, and so can easily be cleaned. The disadvantage of cooking by this process is the time required, two hour at least being taken for most foods. The advantages are that tough, and therefore unpalatable, food cooked by this slow process becomes tender, and that no juice of fruit or gravy of meat is lost. It also has the great advantage of being a great saving of time and labor, as it needs no fire to be kept up and tended, no heat of oven or pot to be regulated. There is no heat or odor escaping into the room, and no one getting overheated by supervising the cooking. Also, food may be left for hours, and no risk is run of burnt food or burnt pots. In the country, where there is often no fuel but wood used, it is very difficult to leave a fire which can be counted on to burn steadily, unwatched, for any considerable time. There is always the risk of burning pieces falling out and setting fire to the house, of the fire going too fast and burning the dinner and pots, or going out and leaving the food uncooked. If, when a country woman had to leave home to go into the township, she had the assurance that her dinner was safely cooking, and would be done ready for her when she got home, it would greatly lessen the hardships of her life.

The principle of the Hot Box is the same as that of the Thermos Flask, which is to surround the central vessel (with food in it) with a non-conductor of heat, so that the heat is retained for a long time. Any wooden, metal, or even cardboard box, will do for use as a fireless cooker, provided it has sufficient strength to take the pressure of packing material and the weight of the billy and its food contents in the centre of the box. There must be at least three inches of packing material surrounding, and under, and over, the billy. For the packing material, loose chaff, in ordinary brown paper bags, or the straw covers of wine bottles, split open at the cork end, so as to lie flat, may be used. Slag wool, kapok, pumice stone in small lumps, charcoal, hay, newspapers, or sawdust, may be used; or any woollen scraps of material. It is a good thing to line the box with some sort of woollen material before putting in the packing, but it is not essential. If the discs are used, the slag wool or pumice stone would be best, as they are not inflammable, but anything which will not conduct heat may be used for the packing. The box should always have a lid of some sort, if on hinges and with a catch, so much the better. The more closely it fits, the less heat will escape. Old tin hat-boxes, travelling trunks, wooden boot or butter boxes, may be used. The packing material should not be pressed down very hard and firm, but should be used in only sufficient quantities to fill the three inches of space between the box and billy, without leaving any part empty or the material falling about loosely. After the three inches of packing has been put in the bottom of the box, the billy should be put on top of it and surrounded with folded papers or the packing material sufficiently firmly for the space occupied by the billy to remain the same when the billy is drawn out, as it must be possible quickly to replace the billy in the box and close the box when the food has boiled and is ready to be left in the cooker. The surrounding packing material must reach to the top of the billy and meet the cushion or whatever pad occupies the top of the box, so that the billy is completely surrounded by non-heat-conducting material.

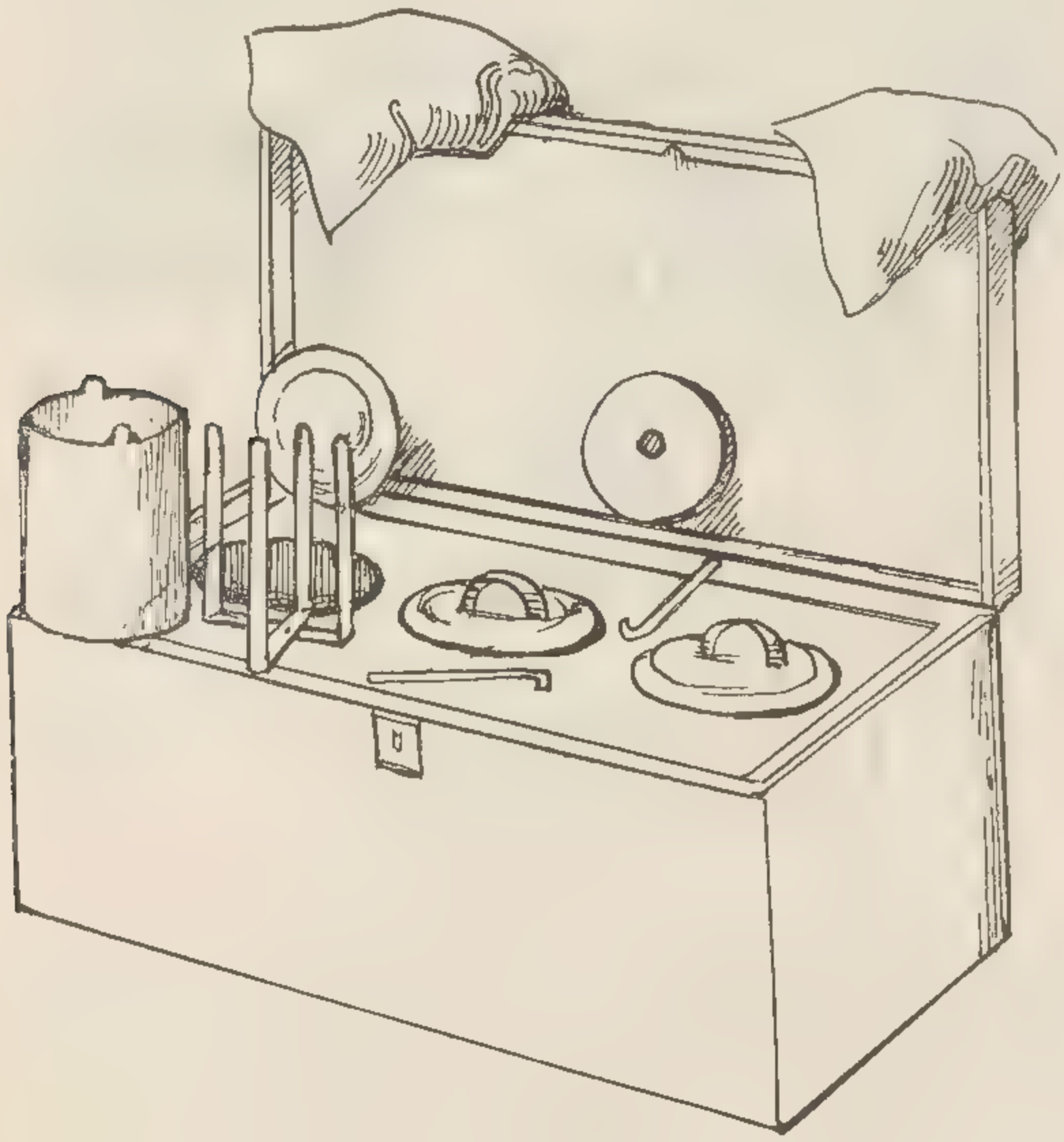
If the hot discs are used there is a risk of fire unless the least inflammable of the packing materials, that is slag wool or pumice stone, is used.

The discs may be obtained from The Federal Iron Foundry, 200 Latrobe Street, Melbourne. The slag wool may be bought from A. V. Leggo, 524 Collins Street, Melbourne.

HOME-MADE COOKER FOR ROASTING AND BOILING

186. (Illustrated.) An ordinary boot box was brought by the grocer, being the ordinary size, 2 ft. 6 in. in length, and having a hinged lid. A tight-fitting piece of wood was placed inside the box close to the lid, like a double lid, on the top of the underpart of the box. Three circles were cut in this wood and

into these circular holes three billies were fitted, the top edge of the billies resting on the wood. The box was then turned upside down, and the bottom of it taken off. The whole of the space between the inverted billies was filled with sawdust. Then two layers of newspapers were placed over the sawdust, the bottom of the box nailed on again, and the box put right side up. The box was then ready for use. The centre billycan, being the largest, is used for roasting. This is done by taking two round iron discs about the size of a tea plate and heating them until a small piece of white paper will brown quickly on them, then placing one on asbestos in the bottom of the billy. Another can, an inch smaller than the one in the box, contains the meat, and is placed on the hot disc. A wire stand is placed in position over the meat



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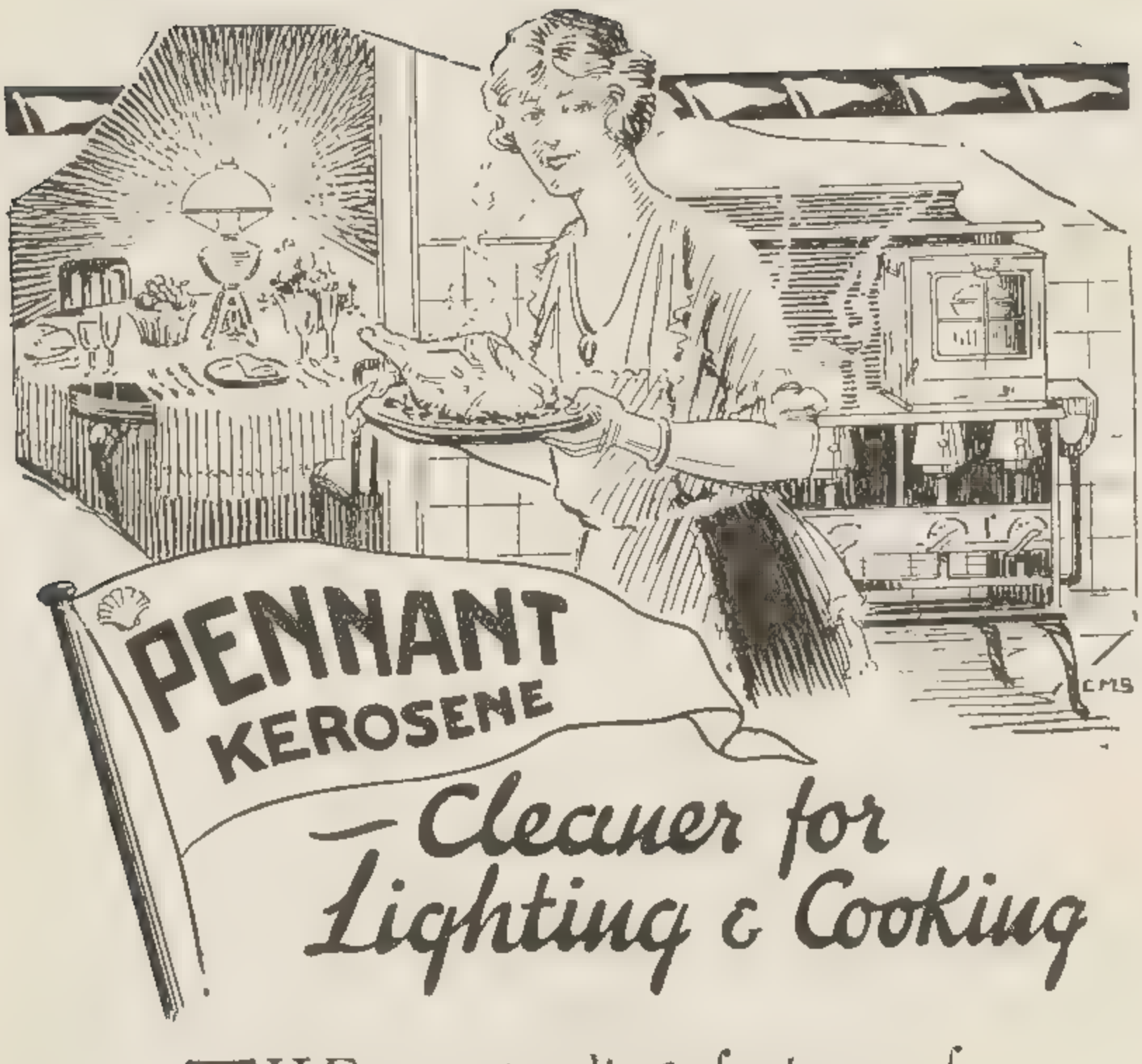
and the other hot disc rests on that. The lid of the can is then closed tightly and not opened until the meat is ready for use. Thin cushions cover the top of the cans and the box lid is closed.

FIRELESS COOKER WITHOUT DISCS.

187. Before being put in the box, joints should be thoroughly heated through, usually taking about half-an-hour. Stews should be cooked ten minutes, fresh vegetables, rice, tapioca and oatmeal about five minutes, and fruit just brought to the boil before being put into the box. Bones for stock must be boiled half an hour and left in the box over-night.

Oatmeal will only require to be re-warmed in the morning if left in the box all night. Roughly speaking, meat takes four hours; vegetables and cereals about three hours. The general principle is that the longer the food is cooked on the fire the less time is required in the box. Keep the box out of draughts, and it will be warmer if off the floor.



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Ask at your Store for

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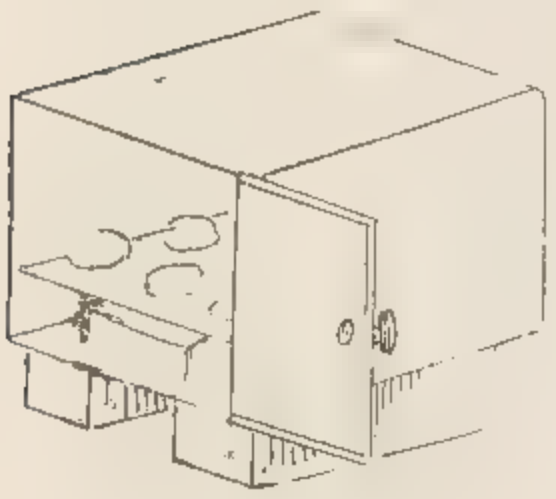
COOKING RECIPES FOR COOKERS.

188. Roasting.—A 6-lb. roast of beef requires 2½ hours in the box.

Mode.—Place beef (rolled) in large vessel after rubbing it over with flour and a spoonful of dripping. Heat two discs on gas or flame; this usually takes about twenty minutes. Place one in the bottom of the well, with a piece of asbestos under the disc. Place the vessel with beef in it on the disc, put the wire stand over the meat, then place the other hot disc in stand and close down tightly. Do not open the lid again until the food is ready for use. Mutton is treated in the same way. Potatoes may roast with the beef or parsnips, &c.

Boiling potatoes, turnips, carrots, &c., the vegetables should be put into the vessel with plenty of water, brought to the boil, and left on fire for five minutes boiling hard, then quickly transferred to the box and left for an hour and a half. No hot discs are required.

All puddings, such as plum, beef, steak, apple, or any fruit pudding, should be placed in closed basins, then put into vessel with plenty of water and boiled on fire for thirty minutes, then transferred to hot box for four hours, with one hot disc under the vessel.



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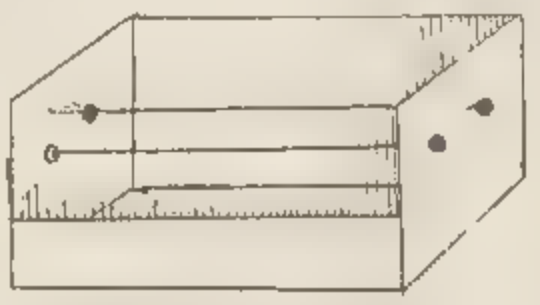

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For scones and cakes, two hot discs are necessary—one below the cake tin, and one above, resting in the stand. A sponge cake requires one hour; a scone the same; a plum cake, two hours or more, according to size.

All jams should be brought to the boil with the sugar and boiled for thirty minutes, then lifted quickly and placed in the box over a heated disc, and left until morning. The jam will only require heating in the morning, before the jars are filled.

HOME-MADE OVEN.

189. (Illustrated.) A small oven may be made from a biscuit tin with a knob screwed to the lid. A wire tripod is made to fit inside, and on this rests a shelf made of a piece of kerosene tin. The oven may be placed over two bricks and a fire lighted underneath. It is splendid for any quick cooking, such as scone making, and needs very little fire.

EMERGENCY OVEN.

190. Should the oven be broken beyond repair, make a good fire, push the coals to the sides of the fireplace and place your pie-dish, loaf, or scones and cakes on the hot bricks to be baked. Cover with a milk dish or kerosene tin opened lengthwise, and place red coals on top and all around the dish or tin. Shut the door to prevent the cool air striking the oven. When the cooking is finished, use tongs to lift off the cover.

HOME-MADE STOVES.

191. A kerosene tin or old oil drum makes a stove for boiling a kettle or saucepan. Cut the top out of the tin and make a small opening in the front for putting in chips. About half-way up put two holes on either side in which to insert bars.

192. An oil drum makes a good oven also if it is built around with bricks and a fire lit underneath it. Fit in a piece of tin as a slide.

193. (Illustrated.) Another way of using a kerosene tin is to lay it on its side, cut out the top and part of the front. Punch holes with a big nail in the part of the front that is left in. Make two holes in each side of the tin half-way up, and insert bars.

If using a primus stove, stand it in this tin and raise the bars a little higher. It will then be much safer to use. Two pots may be boiled at one time.

HOT WATER FOUNTAIN.

194. Take a kerosene tin and make an H-cut the full length and width of one of the sides. Roll the two cut pieces to either side to form handles. A tin cut this way heats water very quickly.

HOME-MADE STEAMER.

195. As many as four treacle tins or billies may be used at one time with Makeshift 194 for steaming food. Keep the lids on the tins, put a bag, made to fit and used for the purpose, over the top of the cans, and place a sheet of tin over the bag.

SAUCEPAN.

196. Saucepans may be made from jam tins. Get a piece of old broom handle. Turn the open lid of the jam tin around it and put a screw through. This makes a handle. For a lid, use a flat piece of tin cut to the required size with a cotton reel bolted through the centre to raise it by. Handles which grip the sides of the tin may be bought if preferred.

DOUBLE BOILER.

197. A stoneware jar or a large jug, standing in a saucepan of boiling water, acts as a double boiler. An enamelled billy standing inside a larger one also serves the same purpose.

PUDDING BASIN AND STAND.

198. Tin billies make excellent pudding basins, and the lid of a 7-lb. treacle tin with nail holes punched through, placed under the billy, prevents the pudding from burning.

PUDDING CLOTH.

199. (Illustrated.) A handy pudding cloth may be made from a round of unbleached calico cut about two inches larger all round than the basin for which it is intended. To the top of this add a handle of double calico, 1½ in. wide, and about 7 in. long. Fix this as shown. Hem the cloth all around and run through it a tape, or, better still, a double draw-string of tape.

PATTYPANS.

200. Get round Havelock tobacco tins and boil them well in strong soda water to take the paint off. Use as pattypans.

FIRE GUARD.

201. (Illustrated.) Procure a length of wire netting 18 in. longer than your fireplace, to allow 9 in. for each wing of the fire-guard. Nail a batten or strip of packing case on each side of the cut edges. Fasten battens with staples or bent nails 9 in. from each end. and place another batten down the centre of the guard. Bend into shape as shown. Strengthen the top and bottom edges with battens. This fire-guard not only prevents children from reaching the fire, but is useful for drying clothes in wet weather.

STORE AND SAFES.

BINS AND CONTAINERS.

202. PATTERN A.—(Illustrated.) Take two kerosene cases without lids. Stand them side by side lengthwise, with the open side up. Make a slanting cut on either side, starting three inches from the back and extending to three inches below the front. Run a lath up the centre of the front and back, and along the top and bottom edges to join the cases. Lay a strip of board at the back on which to fasten hinges, and make the door from the kerosene case lids. Fit (by cutting down) two kerosene tins into one case. These will hold sugar and bread. Line the other case with white paper and use to hold flour. Paint or stain the bin. A batten, 3 in. x 2 in., may be nailed across the ends to raise it from the floor.

203. PATTERN B.—(Illustrated.) To make a sugar bin, stand a case on end. Take out the top and put a narrow ledge around the inside of the case to hold the lid on. Make a handle from the kerosene tin handle. Cut out the bottom of the case and cut the sides on the slope as shown in the diagram. Leave the back of the case in to act as a leg. Form the bottom of the bin with tin nailed to the inside. Cut a hole in the front of the bin and insert a mustard tin to act as a spout. Cut the mustard tin as shown, after taking out the lid and the bottom. Make slits where the tin fits into the case and hammer the edges back against the inside of the case. Cut a piece of tin to fit across the opening so that the sugar cannot fall out, and keep it in place by wire strung across from a hole on each side of the opening. The diagrams show how to shape the various parts.

204. PATTERN C.—Take a kerosene tin. Cut around it, 4 in. from the top. The smaller piece will be the lid. Turn in ½ in. around the edges of both pieces and beat down. Cut down each corner of the bigger piece for 2 in. Pleat over so that the lid fits over it. Two similar tins may be put in a box and a lid added.

205. PATTERN D.—To carry water without spilling it, take a whole kerosene tin and a two pound treacle tin. Cut the bottom out of the treacle tin, then cut a hole the size of the treacle tin in the top of the kerosene tin and fit the treacle tin into it. Solder the two tins together and place the lid on the treacle tin.

206. PATTERN E.—A five-feet seat and five bins may be combined into one piece of furniture. The bins are made of six kerosene cases, or of four kerosene cases and a case as large as two more cases. Put a piece of timber along the bottom of the cases to strengthen and raise them. Also join the cases by a piece of timber back and front, top and bottom. Join all the lids and strengthen them. Pad and cover with dyed hessian. Paste paper on the inside of the bins and also inside the lid. The first division of two kerosene cases, or one case of equal size, will hold 50 lbs. of flour, the second 70 lbs. of sugar, the third 56 lbs. of rice, the fourth 28 lbs. of flaked oatmeal, and the fifth 56 lbs. of salt.

207. PATTERN F.—(Illustrated.) Take two kerosene or petrol tins. Leave one intact except for cutting out one end. From the other tin cut four triangular pieces to form shoulders on top of the first tin. Put a round piece on top of the four pieces, and make a lid to fit on like the lid of a tea canister. Solder the pieces in position. This makes a useful bin for keeping flour or sugar free from ants.

208. PATTERN G.—Frames, made of the hoop iron off bags, about the size of kerosene tins, or any shape liked, and filled in with wire netting, make good holders for vegetables. The use of such containers, when washing potatoes or other root vegetables, prevents the wetting of the hands. Green vegetables, put in these holders, and hung in the shade, will keep well.

JAM JARS.

209. Cut all bottles down for jam jars by making a ring of iron red hot. Drop it over the bottle and put the bottle in cold water. A little knock will take the top off quite clean.

210. Another method is to tie a piece of wool soaked in turpentine around the bottle and light it. When the wool has burnt out, quickly place the bottle in cold water. The head will then break off.

FUNNEL.

211. Gunpowder flasks with the bottoms cut off make funnels for filling bottles with sauce, &c.

MEAT SAFES AND BAGS.

212. PATTERN A.—When a quantity of meat has to be kept, it may be stored in the following manner:—Have a sufficient number of kerosene tins with handles to hang them up by, and a cross piece to hang the meat in the tin. Put in each tin the amount of meat that will be cooked at one time. Cover it with brine and pour melted fat on top to the depth of about half an inch, cover with damp bag, and hang in the shade and draught outside. The fat for the top may be re-melted. Meat for roasting may be put into a tin of melted fat and let cool. It will keep sweet for a week. See that the meat is quite sweet when it is immersed.

213. PATTERN B.—(Illustrated.) A meat safe may be made of a kerosene tin with four sides cut out and two pieces of mosquito net put on as shown. The net underneath to be sewn tightly and be a fixture, the upper one to be fastened with two safety pins or tapes at edges, to permit of being opened at the one side.

214. PATTERN C.—(Illustrated.) Make two equal-sized rings of hoop-iron, big enough to encircle a fair-sized meat dish. Across one of these rings, fix a piece of strong wooden batten, neatly and securely, and through a hole bored in the centre of the batten pass a strong wire. Secure the lower end of the wire to the batten, and bend the upper end to form a hook, for hanging purposes. A loop of strong cord would serve the purpose equally well. Then make a bag of mosquito netting, just big enough in width to allow the rings of hoop-iron to fit closely inside it. The bag may either have a circular bottom, with an open top, provided with a draw-string, or may be made like a pillow-slip, open at both ends, in which case both ends should be furnished with draw-strings. For greater strength the bag should be made of double net. The bottom of the bag is drawn in, if necessary, and the plain ring is put inside the bag, and pushed down, until the bottom is perfectly taut. The dish of meat is then placed upon the bottom of the safe. The upper edge of the bag is drawn up outside the ring with the hook, the strings are drawn up and tied securely around the wire close above the wooden batten. Hang the safe in a cool, airy place.

215. PATTERN D.—Take a square box and remove boards from the middle of each side to the width of a kerosene tin. Fill in the openings thus formed with pieces of kerosene tin perforated with rows of holes, about one inch apart, made with a small nail. Make a door of tin also, and fix it to the box with hinges. Screw a few hooks into the top of the box on the inside. Drive two staples into the top of the box on the outside, push a piece of wire through them and then drive the staples right down. Twist the wire into a loop and hang the safe by it. This safe is handy for meat and other foods in the summer time, and may be hung in any cool place.

216. PATTERN E.—Make a frame of soft wood about 2 ft. x 2 ft. x 3 ft. high, with wire from the four top corners to hang it up. Cover with hessian, bag fashion, and tie underneath. Put a strong hook inside to hang meat on. Hang in the shade in a draught.

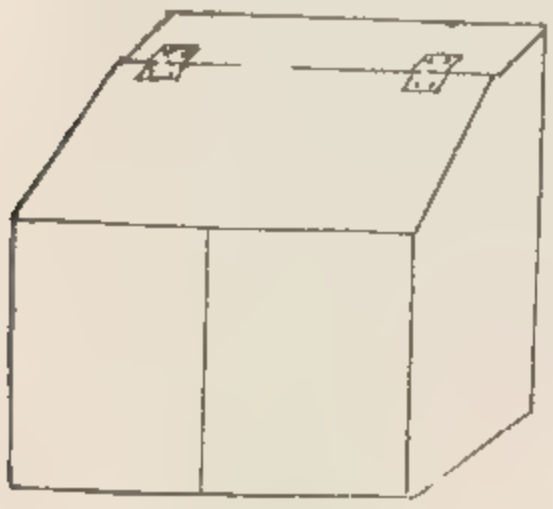
217. PATTERN F.—For a hanging meat-bag for joints, fit a pole along the side of a large bag and put a hook at either end by which to hang it up. Make a board floor to fit nicely in the bottom of the bag. Have the mouth of the bag projecting far enough at the side beyond the floor and

the pole to tie with string when the meat is in. A dish of salted meat may be kept on the board floor, but it must be turned every day if it is lying flat. Small joints may be hung from hooks in the pole. Keep newspapers on the floor to protect it from stains. Hang the bag in the shady part of the verandah.

218. PATTERN G.—(Illustrated.) For a hanging meat bag for a whole sheep, make a bag of hessian or two wheat bags sewn together. Have a hook on the end of a rope and tie the bag securely to the rope just above the hook. Put a small iron hoop in the roof of the bag and a larger one in the middle. Sew the hoops to the bag with twine. They prevent the meat from touching the bag. Tie the bottom of the bag securely when the sheep is in. Protect the bag from the drippings by putting newspapers around the lower end of the joint.

MEAT COVER.

219. (Illustrated.) A meat cover or cover for saucepans may be made from a kerosene or petrol case and fly wire or gauze. Cut three laths 2 in.



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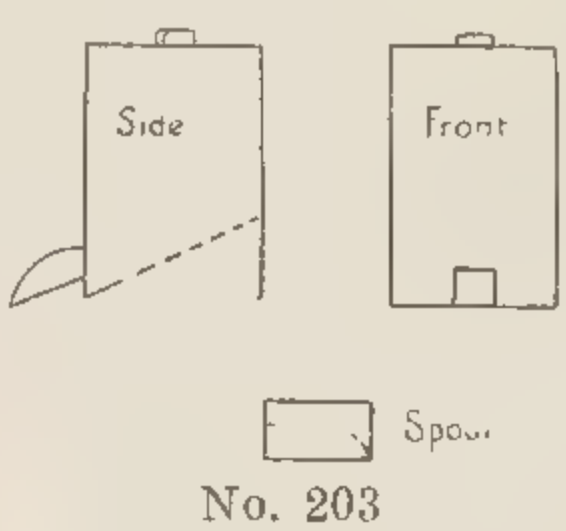

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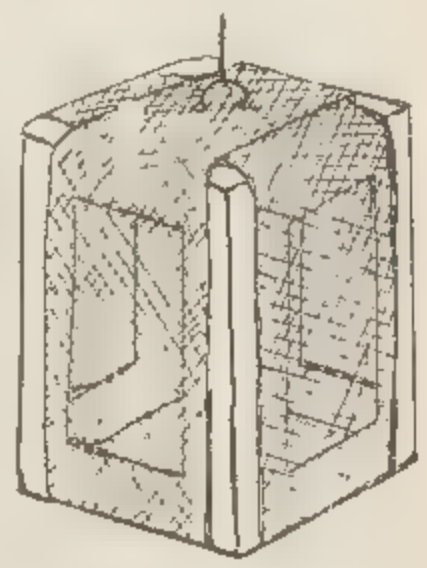

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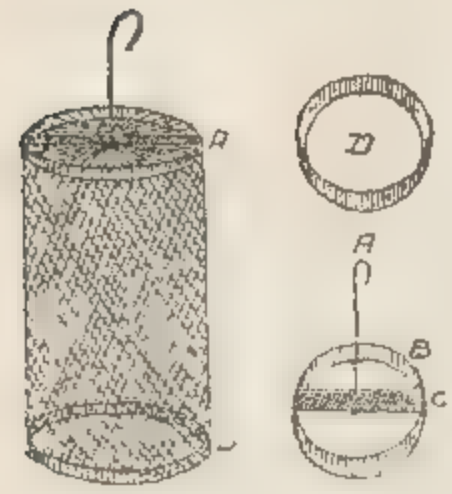

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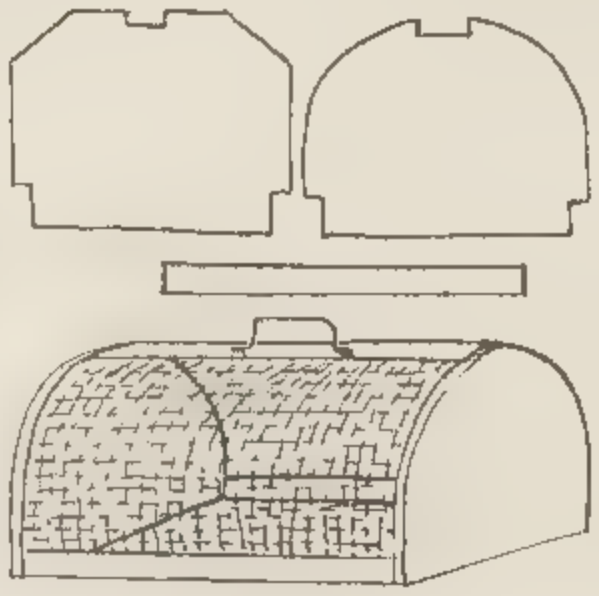

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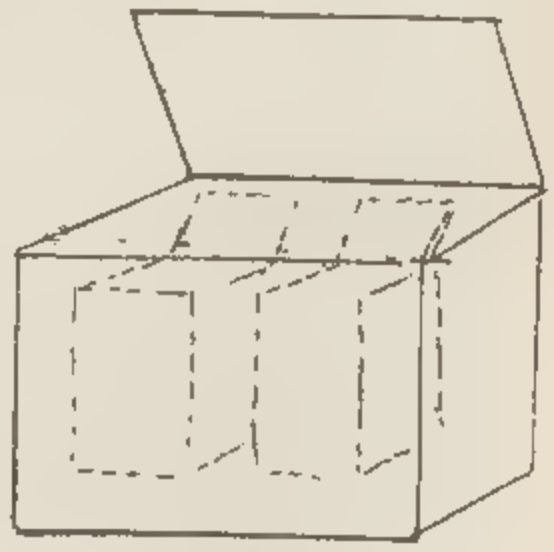


No. 220

wide and the length of the case, and make two ends of the wood, either circular or oblong, both designs being shown in the illustrations. Fit together as shown and cover the whole with the fly wire. Add a small handle made of fencing wire.

"ICE" CHEST.

220. (Illustrated.) Put one or two biscuit tins into a kerosene or larger case. Pack all around with sawdust and make a cushion of hessian stuffed tightly with newspapers to fit on top of the tins. Make a lid with hinges of leather fixed on by large tacks.

BUTTER COOLERS.

221. PATTERN A.—If you have a well, lower the butter in a can until it touches the surface of the water.

222. PATTERN B.—Butter may be kept cool if the vessel containing it is stood in a large plate of water and an earthenware flower pot inverted over it, a piece of wet cloth dripping over the pot into the plate.

223. PATTERN C.—Cut out the sides of a kerosene tin as illustrated in No. 213. Sew together four lengths of cheap, thin towelling, with one side made as a flap. Put a running string through the top of the towelling and

draw it up to fit over the top of the tin. Paint the tin and stand it in an old baking tin. Let the loose ends of the towelling hang in the baking dish. Cut down another kerosene tin to a height of about 6 in. Stand it on top of the safe and fill it with water. Cut four strips of towelling, each 2 in. wide, hang one end in the water and let the other end touch the side of the safe. If the ends in the water are joined and weighted, they will keep in place.

TO KEEP ROOT VEGETABLES FRESH.

224. Dig a hole about six inches deep, and large enough to hold your vegetables comfortably. Cover the vegetables with earth and put a wet sack on top. They will keep quite fresh for a week.

SAFES AND COOLERS.

225. PATTERN A.—(Illustrated.) Screw two kerosene boxes together, one above the other, on their sides. Add legs 2 ft. long. Make two wire gauze doors with cotton reels for knobs and hinge them on to the front of the boxes. Little holes might be cut in the sides and covered with gauze. A small board makes a finish around the top.

226. PATTERN B.—Put a packing case on legs so as to be able to cheat the ants in the hot weather. Cut a piece out of the sides and tack perforated zinc securely over. Make a door for the front and cover with perforated zinc. Put in a shelf or two. In hot weather, cover with hessian or clean bran bags kept damp, and you will have a good, cool store for butter, milk and meat.

227. PATTERN C.—To keep articles of food which are hung in the larder free from dust, make a safe of wire and butter muslin. Bend a length of wire to form a rather large square. Have the muslin the same length as the wire and tack it all around the wire. Join up the ends, but leave the other side of the muslin free. Place four or five hooks on the bottom of a shelf in the larder, hang the food to be covered on them, and fix the square of wire on to the shelf so that the muslin hangs around the food. Tie the muslin at the bottom with a piece of tape.

228. PATTERN D.—Select a spot outside that is always in the shade and dig out the earth to a depth of three feet, and as large as required. Line with bricks and fill in between the bricks with concrete or cement. Let the top row of bricks be placed an inch further back than the row below. This forms a ledge to put a cover on. A sheet of tin with small holes in it for ventilation makes a firm lid if boards are tacked across it. Lay wet bags in the bottom, and butter, milk and cooked meats may be kept there. Place a wet bag on top of the tin cover. Keep several bags for this cooler, and change them every day, hanging them in the air when not in use.

229. PATTERN E.—A cupboard for keeping food fresh and cool in the summer is made as follows:—Cut away the flooring boards to the size required for the cupboard, and over the hole put perforated zinc. Above this build the cupboard. Through the top of the cupboard bring a pipe 2 in. or 3 in. in diameter and end it inside the cupboard in a funnel shape. The pipe must be taken out through the roof—and turned in a direction to suit the locality. Instead of having solid shelves, build them of laths. This safe ensures a continuous draught right through and has been proved better than a Coolgardie safe.

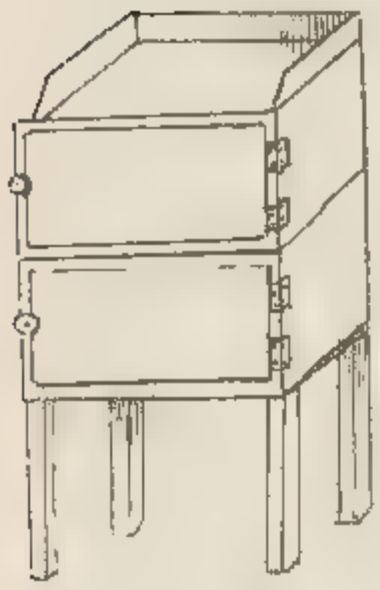
230. PATTERN F.—Have a trap-door in the floor, and under it construct a place for holding provisions. Enclose the space with fly wire netting and the draught underneath the house will keep things cool in the hottest weather. Butter, cooked meats, jellies and custards, should be protected from dust by a wire frame with butter muslin fitted well over it.

231. PATTERN G.—To make a Coolgardie safe, build a frame from strong packing cases, and put a shelf about 2 ft. from the ground, and another on top 5 ft. from the ground. Cover the frame with hessian, putting a door on one side. On top, place a kerosene tin cut in half lengthwise. Keep this filled with water, and, hanging from it over the sides of the safe, put strips of hessian, towelling or flannel. Make gutters of pieces of tin to go around

the bottom of the safe, making them all slope toward one corner. Here let the water drip into a tin underneath. This water may be used again. Keep in a breezy place.

A very simple Coolgardie safe is described under the heading Butter Coolers—No. 223.

232. PATTERN H.—The tank stand should be about four to six feet high, to permit of a pipe leading direct into the kitchen with a tap over the sink. Enclose the space under the tank with wood from cases, and line with kerosene tin, putting sand or sawdust between the wood and the tin. The lining may also be made of wood, but it is necessary to paper the walls inside to keep out the dust. Make the floor of stone or concrete. If the walls can also be made of stone or concrete the store will be much cooler. Leave openings at the top for ventilation, and cover these with fly wire. Put a wooden door on the protected side, and build a stand for perishables. In the hot weather, flush out with water every morning (or occasionally, if water is scarce). This store-room will keep butter, milk, meat and bread cool and sweet.



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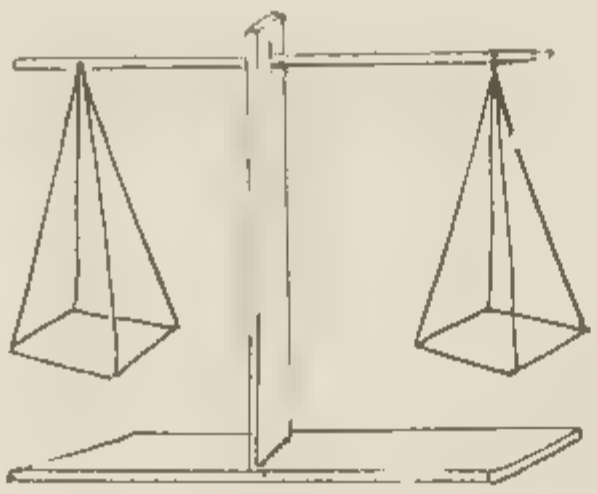

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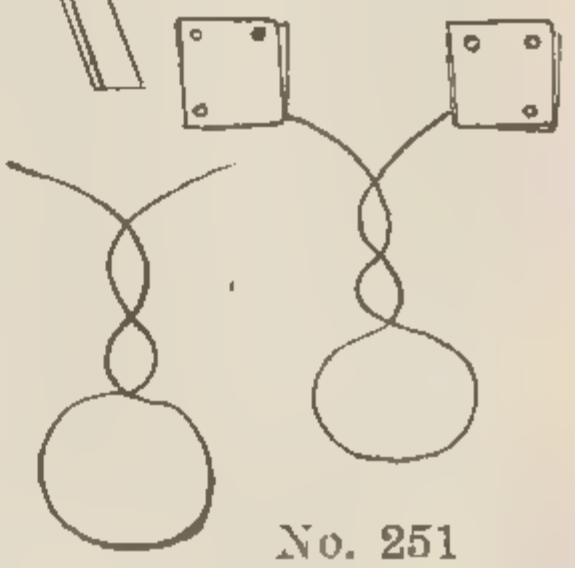

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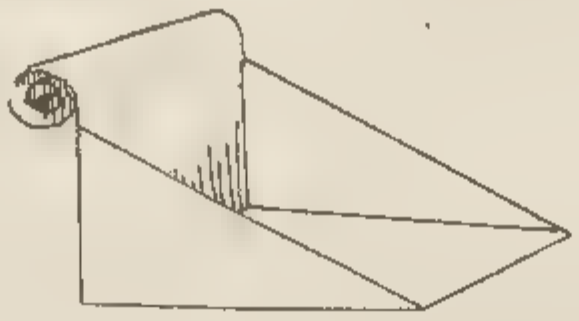


No. 243

DAIRY.

233. A good makeshift dairy was made years ago by the father of a contributor to the makeshift competition. He used a large toy case, obtained from a warehouse, but the same size may not be obtainable nowadays. Holes were bored in the back, sides and door of the case near the top, and three shelves, 18 in. deep, were fitted into the case. These held the family supply of milk. On the floor stood two bins holding the fowls' food. The top was covered on the outside with flattened kerosene tins. The case was lime-washed inside and out, and stood under a boxthorn hedge, where it was always cool. A large tree should keep it as cool as the hedge did.

CHURN.

234. A substitute for a churn will be found in a 7-lb. treacle tin. Half fill it with cream and shake it. Lift the lid occasionally to let the air escape.

BUTTER PATS.

235. Two pieces of packing case 9 in. x 3 in. and about ½ in. thick, with about 3 in. shaped off to form a handle, make a pair of butter pats. Push a three cornered file up and down it several times to form furrows for rolling the butter into fancy shapes.

ONE-POUND MEASURE BUTTER BOX.

236. Take a chalk box or a similar one and make it perfectly clean. Work into it a weighed pound of butter. If it does not quite fill the box, mark on the sides where it reaches and saw off the unused part of the box. With this measure a pound of butter is quickly weighed out either for selling or cooking.

DOES YOUR LAMP GIVE A BAD LIGHT?

A good kerosene will not give the best results if the lamp is not well cared for. Dust and neglected wicks often cause a smoky, flickering flame. A few moments spent daily in cleaning and trimming ensures a better light.

Burner and Draught Perforations.

Clean the draught perforations and burner with a small brush every day. They very quickly become clogged with dust and fluff. Occasionally the burner should be washed in hot water and soda.

To Trim Wick.

Trim the wick daily, but do not cut it. Before cleaning the wick, remove the flame spreader in a circular wick burner or raise the hood in a flat wick burner. Then with a soft cloth rub the wick gently from the centre outwards. Use scissors only to remove loose ends.

Changing the Wick.

Use wicks that fit. They must neither be too large nor too small. They should be changed every two months, as they become clogged, and the oil cannot then have free ascent to the burner. See that the new wick, which should be quite dry, is long enough to reach the bottom of the oil font. A dry wick is essential. A damp wick is sometimes caused by not drying the burner or oil font thoroughly after washing.

Even Surface in a New Wick.

To get an even surface for burning in a new wick, empty the oil out of the font and turn up the wick about half an inch. Then dip the half inch of wick in kerosene, replace the burner and turn the wick down until about an eighth of an inch shows above the wick tube. After placing the lamp in a position free from draughts, the wick is lighted and allowed to burn until the flame is at a low level. The chimney can then be put on and the flame let burn out. The wick, which will now be level with the wick tube, should be rubbed across or around with a soft cloth. After refilling the font with Pennant Kerosene, the lamp is ready for use.

To Clean Oil Font.

The oil font needs to be cleaned frequently to remove any dirt that may collect. Empty out the old oil and rinse the font with fresh kerosene in preference to water, but, if water is used, the font must be quite dry before being refilled.

SCALES.

237. (Illustrated.) A pair of scales that will be satisfactory for most requirements may be made from a kerosene case. Use one side of the case for the foot of the scales, and nail half the other side into the centre of the foot. The balance cross-bar is a strip from the second side and is let into the middle of the centre piece with a long nail or piece of wire on which the bar is to swing. A hole is bored through each end of the cross-bar at equal distances from the centre. Through each hole, thread two equal lengths of cord and pass them through holes in the corners of two wooden trays and tie underneath.

STEPLADDER.

238. (Illustrated.) The following timber is required to build a pair of house steps:—A slab of timber about 15 in. x 10 in. for the top, two lengths of 6 in. x 1 in. timber for the front legs and the steps (the amount of timber used varying with the height of the steps and the number of steps), two lengths of 4 in. x 1 in. timber for the back legs, one 15 in. length of 2 in. x 2 in. (to which the top is secured and into which the front legs are nicked), and two pieces of 3 in. x 1 in. timber about 15 in. long. One of these is nailed to the back of the front legs near the top to prevent the steps from spreading by catching on the piece of 2 in. x 2in. timber; the other length is nailed across the bottom of the back legs. The steps are cut from the 6 in. x 1 in. timber. About 3 in. from the top of the front legs bore a hole and connect it with the back legs by a bolt. The back legs must be further apart than the front to allow the steps to close up.

LINING THE WALLS.

239. For the walls, cut chaff bags open, tack on firmly, tapeing them and making very tight. Paper over smoothly with brown wrapping paper, being careful to use the one shade of paper. A bright border, which may be bought very cheaply, gives a good finish if run around the top just under the ceiling.

240. A wall lining may be made of hessian, finished with two or three coats of cold water paint. Hessian ceilings, whitewashed with French whiting and a little glue, look like plaster, and cost little.

241. A splendid lining for outside or inside walls may be made with hessian, 18 oz. quality, tacked on fairly tight. Damp well, and apply a coat of whitewash made as follows:—¼ kerosene tin of rock lime, 3 lb. salt, 6d. powdered alum, 1 lb. dripping, and sufficient water to make the lime boil. This makes a firm mixture, which is very warm, and will turn the rain as well. It is better made overnight. Two coats have a good effect, and it can be done over with any color cold water paint or with paper. See also Nos. 382 and 383.

WOOD BOX.

242. To save labor and have a supply of wood near the stove, build a small place on the outside of the kitchen, about 4½ ft. high, with a door on the back. It should be close to the chimney. Make an opening in the wall of the house so that the wood may be reached easily. A door may be fixed to this, or a small curtain hung in front. Fix a shelf in the upper part to hold stove brushes and flat irons. There is always enough waste iron after the roof of the house is cut out to cover a little place like this. The wood may all be put in from the outside.

If it is not convenient to build the wood box outside, have a box inside the house, and make an opening into it from outside as well as inside, so that it may be filled from outside.

In districts infested with white ants it is advisable to keep the wood heap well away from the house.

DUST PAN.

243. (Illustrated.) Cut a kerosene tin slantwise from about 3 in. down one seam across a long side to the opposite seam, about 1 in. from the bottom. Do this also on the opposite side of the tin, and join up by cutting across the

line between the points 1 in. from the bottom. Roll enough of the tin back to form a handle. Make a double fold on the slanting line of half an inch and hammer flat. Hammer all raw edges.

DUSTLESS DUSTER.

244. A splendid dustless duster, or a polish for a floor mop, may be made by using three parts of kerosene mixed with one of raw linseed oil. Use a soft duster of silk or muslin and sprinkle it with the mixture. It will soak up the dust and leave a nice polish.

245. A cheaper duster for floors is made by soaking the cloth in crude oil and allowing it to dry before using. It needs washing from time to time and should afterwards be soaked in fresh oil.

FLOOR MOP.

246. Cut into squares an old pair of underpants and nail the squares to the end of a long wooden handle. Have enough squares to make a suitable thickness for washing floors. Old clothes may be cut into strips and nailed and bound to a broom handle. For a floor polisher, put a piece of board on the end of a broom handle and cover with several thicknesses of flannel. Unravel old woollen garments and wire them to a handle. Soak in oil and you have a floor duster.

WHITEWASH BRUSH.

247. Make a whitewash brush of binder twine. Take twenty sheaf-lengths, hang over a straight stick to get the middle. Tie in the middle and bind with twine or string. Clip the ends even.

HEARTH BRUSH.

248. A hearth brush may be made of hay bands tied together; or stringy bark, the bark tied at the top and frayed out at the broom end. The wing feathers of poultry may also be used.

THATCH BROOM.

249. Dig up a small bunch of thatch by the roots and leave it in the sun to dry for a few days. Cut off the roots and lay it evenly around the handle. Tie tightly with fine wire or strong string. Drive a small nail in the head of the broom and twist the wire or string around this. Then turn the thatch down and sew through with string in the same way as a bought broom is done.

LONG BROOMS.

250. To wash high ceilings and verandahs a brush may be made with a piece of pine board 18 in. long and 4 in. wide with a piece of board the length required for the handle. Nail or screw the small board to the handle and tack or stitch on any rags, such as stocking tops.

A window washer for cleaning high windows on the outside may be made in the same way.

BROOM-HOLDER.

251. (Illustrated.) Make a broom holder from a piece of No. 8 gauge wire and two pieces of tin. Twist the wire on a stick larger than the broom handle, as shown. Bend over two pieces of tin to hold the ends of the wire, and nail the apparatus to the wall through the tin. To use the holder, put the handle of the broom through the ring and let it fall to its full length. The weight of the broom holds it in the loop.

CHIMNEY SWEEPER.

252. Take 30 ft. of fencing wire—No. 8 is the best thickness. Select a strong post and put the wire over it, having the ends together. Then let two persons take each an end and twist loosely along the whole length. Leave the ends sticking out at an angle to act as prods. Lift the wire off the post and use the loop at the top as a handle. Push the wire up and down the chimney and it will act in corkscrew fashion and remove the soot splendidly.

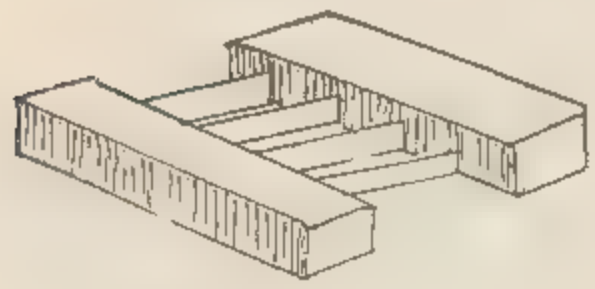
VERANDAHS AND WASHHOUSE.

VERANDAH CURTAINS.

253. In summer, hang a hessian curtain over the back door to drive flies off the backs of those entering the house. If several bags are hung separately along the outer edge of the back verandah opposite the kitchen wall, they will help to keep the kitchen cool. They may be tied up after sunset when air is needed.

PORCH.

254. If you have no back verandah, build a porch at the kitchen door to keep out direct sun and rain. The roof may be made of flattened kerosene tins if no galvanised iron is available. Put a shelf across the corner of the porch to hold a wash-hand basin and soap. Have a roller and towel at the side. A floor of double boards is an improvement.



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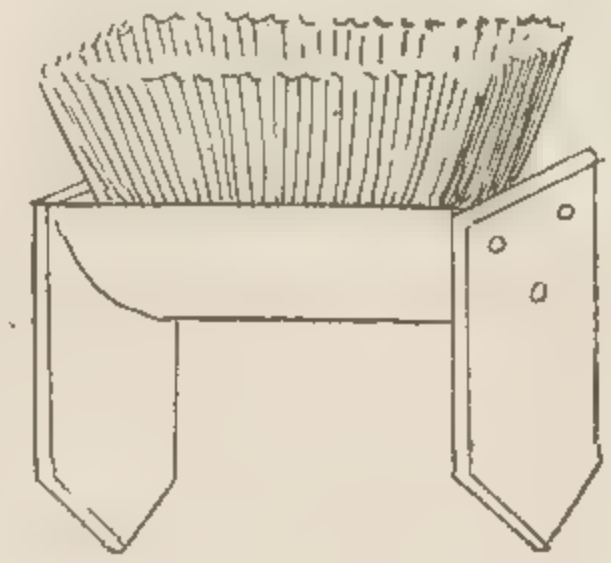

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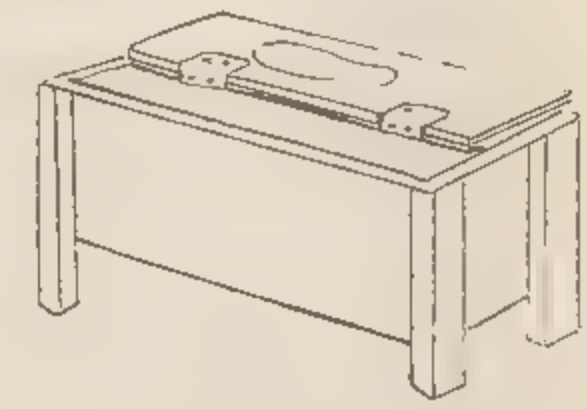

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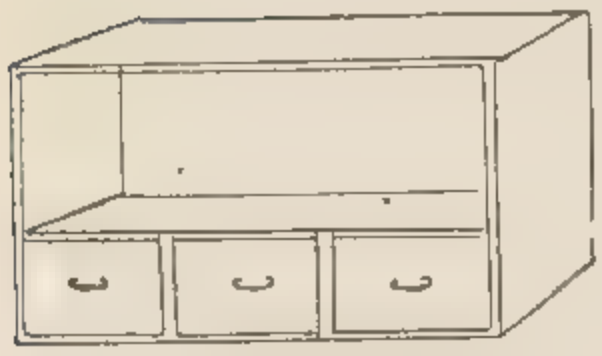

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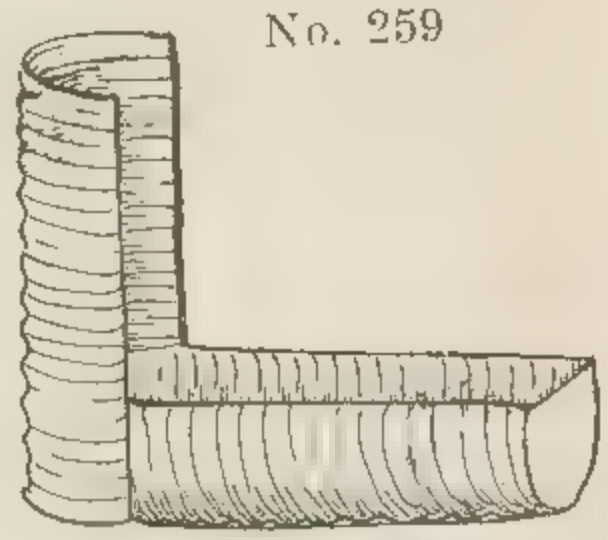

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BOOT SCRAPERS.

255. PATTERN A.—(Illustrated.) Take two pieces of 2 in. x 3 in. hardwood 12 in. long. Four inches from one end of each cut a slot with a saw, about ¾ in. deep. Cut three more slots parallel to the first, leaving an inch in between each. Take four pieces of hoop iron, 1 in. long and ¾ in. wide, and, placing the two pieces of wood 8 in. apart, with the corresponding slots opposite one another, drive the hoop iron into the slots.

256. PATTERN B.—(Illustrated.) Prepare two pieces of hardwood about 12 in. x 3½ in. x ¾ in. Cut one end of each piece into a point, as shown. Fasten the other ends to the head of a stiff broom by means of six screws. The pointed ends should be driven into the ground.

257. PATTERN C.—A sawn slab of treefern makes an excellent mat on which to wipe muddy boots.

258. PATTERN D.—The head of an old spade or shovel hammered into the ground is a quickly-made scraper.

BOOT CLEANING BOXES.

259. PATTERN A.—(Illustrated.) Procure a petrol case. Put a leg at each corner to raise the box to a convenient height. Divide the lid into two pieces. Nail down the back piece and hinge the front piece on to it so that the front piece lies back on it when opened. Put a rest on the inner side

of the front half of the lid on which to place the foot when brushing. Polish and brushes may be kept inside the box, which may be used as a seat on the back verandah.

260. PATTERN B.—(Illustrated.) Three one-gallon oil tins, as supplied with motor and farm oils, and a good stout case make a boot brush holder. The inside dimensions of the box must be at least 22½ in. long and 10 in. deep, but the width is not so important. Cut a side out of each tin and fit them into the bottom of the case, from which the front has been removed. Nail a piece of board across the case to cover the tins, and separate them by pieces of wood about ½ in. thick. The tins form drawers in which black, tan, and white cleaning brushes and polishes may be kept. The shelf may be used for stacking dirty boots, and the cleaning may be done on top of the box.

BOOT OR STOVE POLISHER.

261. An old stocking top stuffed with rags makes a good boot and shoe polisher. Stove polishers may be similarly made.

WASH BASINS.

262. Massey-Harris tins, with one side cut out, make satisfactory wash basins.

BATH.

263. PATTERN A.—A bath may be made of plain galvanised iron, set into a wooden frame in the same manner as a horse trough is made.

264. PATTERN B.—(Illustrated.) The halves of a 200-gallon tank may be made into a bath and shower screen. Cement the bath, but leave the tap hole uncemented to let water off. Use a cork as a plug. Paint the bath inside and outside and keep it in position with a wooden frame on four legs.

265. PATTERN C.—Where water is scarce and a sponge and basin have to do duty for a bath, construct a galvanised iron "tray" 3 ft. square (or diameter if circular). This may be carried into the bedroom to catch the water splashed from the basin, which will stand in the centre of the "tray."

DOOKIE COLLEGE SHOWER-BATH.

266. (Illustrated.) A portable shower for a house, when the water is not laid on, may be made by a handy person from a kerosene tin, a jam tin, a piece of chain or wire, several feet of hoop iron and a piece of batten.

The kerosene tin is opened at the top and a wire handle like an ordinary bucket handle fitted in.

At one side at the top, the piece of wood is fitted inside and nailed; from this piece of wood a wire is fixed to the top of handle for a hook to suspend shower when in use. The jam tin, being a large one, is cut in half, and one piece soldered underneath the bottom of kerosene tin; this is perforated to form a shower. The other half of the tin is inverted and used inside for a plug to prevent the water escaping prematurely.

Two pieces of hoop iron are bent over the two sides of bucket for a couple of inches, and along the top of the batten to which it is nailed, and upwards in the centre to the height of about four inches; in between these upright hoop irons, the lever of hoop iron is made and fixed, one end being fixed by a wire or chain to the inverted jam tin inside the bucket. On the other end of lever outside, the chain is fixed longer than the bucket to allow sufficient height to hang shower up.

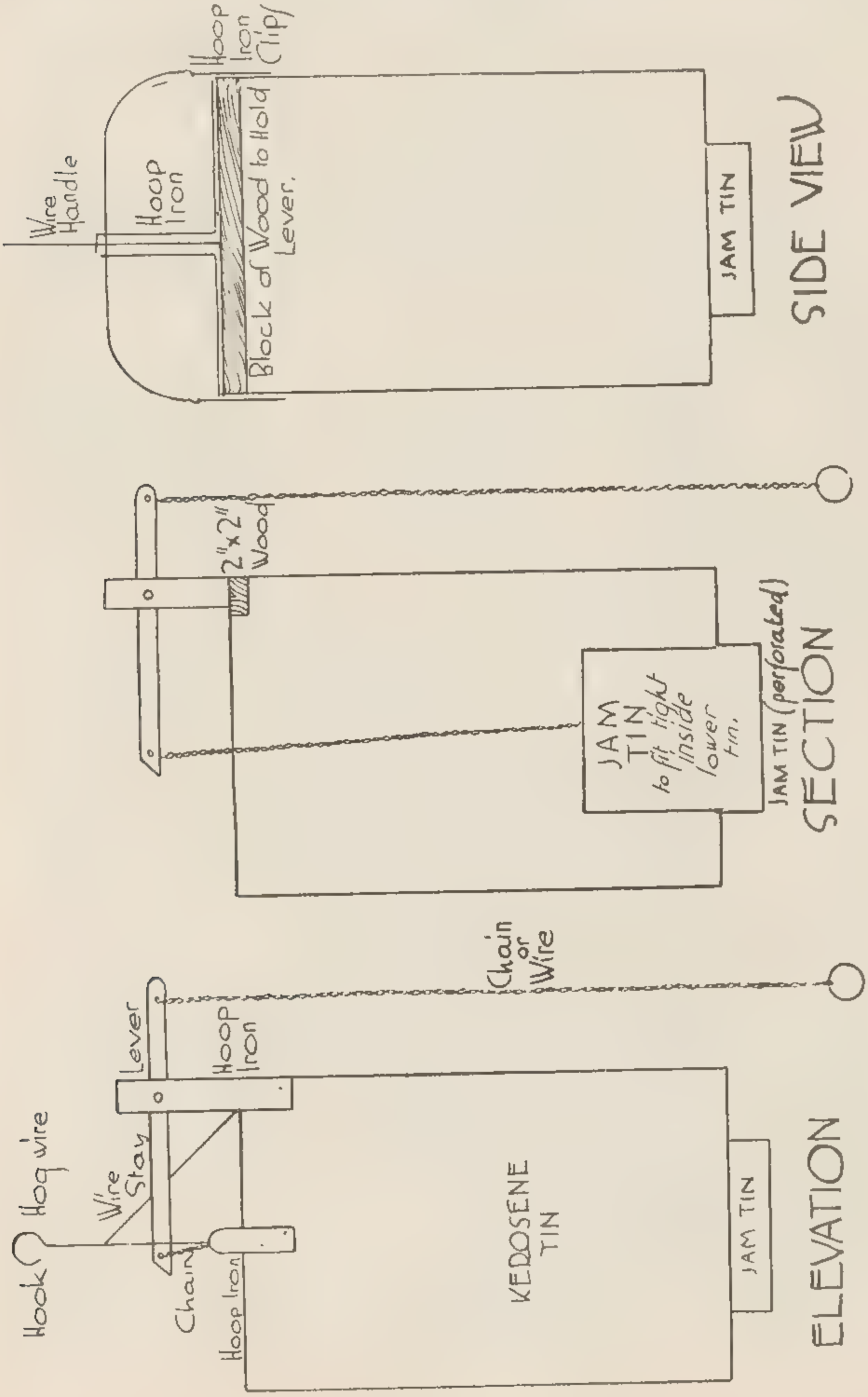
To convey water to the bathroom the inside tin is fitted tight into the lower one. The water may be any temperature desired. By means of a pulley, haul the tin to a suitable height.

To release the water the chain is pulled, which lifts the top tin out of the spray. If the spray holes are put in with a fine nail the shower will run for over two minutes.

WOODEN BATH MATS.

267. PATTERN A.—(Illustrated.) To make the bath mat shown, procure three battens measuring 20 in. x 3 in. by 1 in. Saw each batten into three

lengthwise, making nine lengths altogether. Similarly cut four battens 18 in. long, making twelve lengths altogether. Place the nine sticks about an inch apart and lay the twelve sticks across them. Make small nicks in the nine sticks, brush a little glue into the nicks, and fit in the twelve sticks.



No. 266

268. Pattern B.—(Illustrated.) Another mat may be made from a piece of packing case measuring about 18 in. by 24 in. Underneath nail five strips of timber one way and two the other way at each end. Bore holes through the top and smooth away any rough edges.

TOWEL RAIL.

269. (Illustrated.) Make a towel rail as shown. Set the rails so that the towels hang clear of each other. Enamel white or stain. A brush-and-comb bag may be hung at the side.

MAKESHIFT WASHHOUSE.

270. If a washhouse is not built with the house, erect one as follows in a convenient spot against the wall of the house. To make the roof, open five sacks, sew firmly together lengthwise, and spread on grass. Have ready a rot-proof mixture made by melting 3 lb. of unsalted mutton fat and 3 lb. of Stockholm tar in separate vessels. Mix well together. (See also No. 311.) Paint the sacks with the hot mixture, allow them to get dry, and then give a second coat. When that is dry, paint the sacks on the other side. Nail a 10 ft. length of 3 in. by 2 in. timber to the wall of the house, about 9 ft. above the ground. About 4½ ft. out from the wall put in two fencing posts, each about 7 ft. high and 10 ft. apart. Nail a 10 ft. length of 3 in. by 2 in. timber from post to post, and a 5 ft. 9 in. length of 1 in. by 3 in. batten from wall to post on either side. Nail to this framework the bags prepared for the roof. If preferred, the roof may be made of sheets of bark, palings, or iron, but in that case more battens would be required. Sack or hessian sides may be added, but the side nearest the tank is best left open.

271. (Illustrated.) To make a washing bench, fit two 6 ft. lengths of 2 in. x 3 in. timber to four legs, each measuring 16½ in. by 2 in. by 3 in. Two upright lengths of timber measuring 33 in. by 2 in. by 3 in. are fitted to the 6 ft. lengths at 2 ft. from one end so that the bottom halves will form a fifth and sixth leg to the bench, and the upper halves will serve as a frame to which a wringer may be attached. Nail eleven battens measuring 20 in. x 1 in. x 3 in. across the top of the 6 ft. lengths on the 4 ft. side of the wringer frame, and five battens across the other side. Nail a batten across each pair of legs to strengthen them, and brace the eight corners with battens.

The contributor of this makeshift states that her husband made her a similar bench, and it has been in use for fifteen years. He split and adzed all the timber himself, and sawed slabs of tree fern on which she stood, when washing, to keep her feet off the damp ground.

272. When ordering a tank, she had an attachment soldered to the tap, so that she might connect a hose to it. A 12 ft. length of rubber hose was attached to the tap and used to fill the copper and tubs. When the copper and tubs were ready for emptying, the tap was turned on long enough to fill the hose with water, the loose end being pressed down into the bottom of the tub. Then the hose was detached from the tank and that end dropped into the drain, when the tub was emptied without any lifting.

273. The writer states that her drain is made of hardwood slabs lying between stones arranged to keep the water from overflowing at the sides. The stones are used as bricks are difficult to get, and stones are found on the farm.

274. The fireplace is two large stones with bars of iron to stand the copper on. To prevent sparks from flying, and to keep the heat around the copper, a screen is made out of the top half of an old 600-gallon tank, with about a quarter of the edge cut out for an opening through which to get to the fire. (The bottom half of the tank is used as a mice-proof seed bin.)

She finds this style of washhouse cool and airy, while the smell of the tar on the roof is pleasant and acts as a disinfectant.

275. A large box with a door may be nailed to the wall of the house to hold the soiled linen.

LAUNDRY HELPS.

276. A good, strong box, about 3 ft. x 3 ft. x 2 ft., with wire handles put on, bottom and sides well perforated with auger holes, and painted and

enamelled white, makes a soiled clothes' box. If mounted on an old set of pram wheels, it serves as a clothes' basket and saves much labor in hanging out the washing.

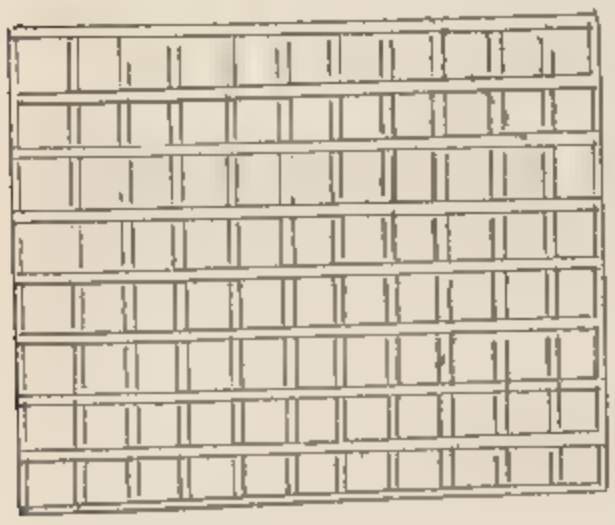
277. When hanging out clothes on washing day, put the basket in a wheelbarrow or old pram, put the pegs in the basket, and wheel it along the line as you hang the clothes.

278. A soiled-clothes container may also be made from the lining of an old stripper. Join up into the shape of a cylinder. If it is raised off the ground and a door made at the bottom, the clothes may be taken out easily when required.

279. Make a boiler of a kerosene tin with a handle; or the tin may be cut lengthwise, and the edges rolled back to form the handle.

280. For a clothes stick, use a long stick shaped at the end like a crochet hook. Your clothes will be easily lifted with it.

281. Use a scrubbing brush to scrub the soiled parts of men's and boys' clothes.



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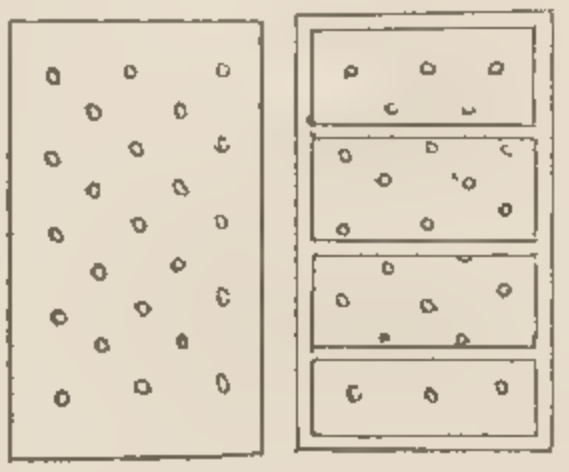

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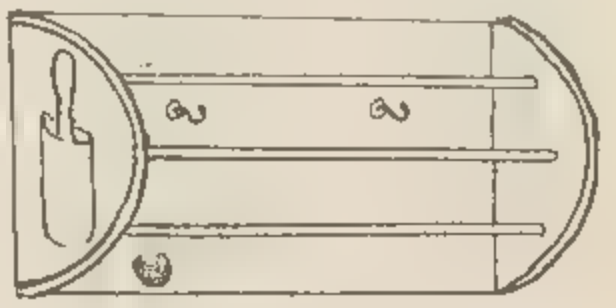

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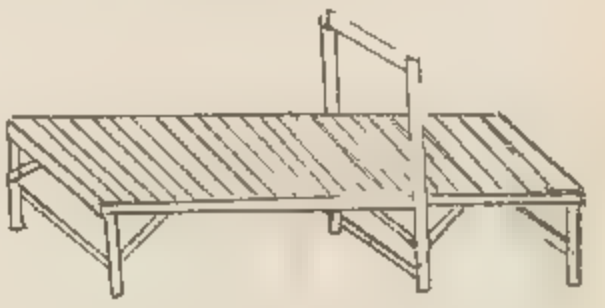

No. 271

282. For tubs use a barrel sawn into two. A kerosene tin cut lengthwise may be used for blueing and starching.

283. For a clothes drainer use a box with a wire netting bottom, or a box with several holes in the bottom.

284. Make a washing apron and peg bag from a sugar bag made to tie around the waist and turned up at the bottom to form a pocket for holding the pegs. Bind with colored strips.

285. A clothes sprinkler may be made from a small bottle with a screw-on lid, if a few holes are made in the lid.

286. An iron stand may be made from a piece of hoop iron bent to form a triangle, or from a horseshoe with three small pieces of iron welded on for legs.

CLOTHES HORSE.

287. PATTERN A.—A clothes horse is simply made from four thin strips of wood about 3 ft. 6 in. high and six rounded pieces, such as broom handles. Nail the rounded pieces to two of the strips, three to each pair. Join the two by a piece of leather or webbing.

288. PATTERN B.—A convenient set of clothes bars may be made with five old broom handles, ten screw eyes, two large hooks, and a piece of ¼ in. rope, long enough to reach double from ceiling to floor. Buy screw eyes large enough to allow the rope to pass through easily. Saw all the broom handles the same length, scrub them clean, and place a screw eye in each end. Fasten the two hooks in the ceiling as far apart as the length of the broom handles; hang the rope over the hooks, and place the ends of the rope through the screws on one bar. Slide the bar as high up as you want it, and put a knot in the rope under each screw eye. Do the same with all the bars, putting them about a foot apart. When the last stick is on, tie a knot in the ends and your clothes bars are complete. When not in use they may be taken down, rolled together, and laid away.

YARD AND GARDEN.

EARTH FLOORS, PATHS AND RAMP.

289. Some pioneers' homes have well-rammed loam floors in all rooms, with 6 to 12 in. border done with whiting, pipeclay or ochre. Loam floors give good service in kitchen, washhouse and dairy.

290. Cover pathways and backyard 6 to 9 in. deep with loam. Puddled earth painted with coal tar answers same purpose.

291. Replace the back door steps by a ramp, which is easy on the busy housekeeper's feet. Make a gradual slope to the floor level, using stones, wood and earth, well rammed. Mix earth into a puddle with water, sufficient for a 3 in. layer on the ramp. Cover with old bags until thoroughly dry, then paint with hot coal tar.

WOODEN DRAINS.

292. If bricks are unprocurable, place slabs of hardwood, 6 in. wide, flat on the ground. Similar slabs, if possible at angle of 120 degrees, form the sides of the drain. Pack stones behind the slabs. Keep the drain clear and flush at frequent intervals.

WHEELBARROW.

293. (Illustrated.) A barrow with 18-in. wheel requires two 5 ft. 6in. lengths of 2 in. x 2 in. or 3 in. x 2 in. sawn or adzed timber for frame and handles. About 4 in. from wheel-end, nail a block of 9 in. x 6 in. x 2 in. timber and bore a hole in centre for axle of wheel. About 18 in. from wheel-end nail a three-cornered solid brace for front board. A foot from handle-end nick a 12 in. length of 3 in. x 2 in. into frame for legs and put a solid brace each side. Width of barrow at front board about 14 in. and at legs 21 in. Nail palings or other timber across frame for floor. Front piece may be any height. If barrow is required for cleaning stables, the legs should be continued several inches above the floor and a length to correspond near front piece. Nail palings along sides, which, though straight, will answer as well as sloping sides, which are difficult to make.

TOOL HANDLES.

294. Tool handles may be fashioned with a spokeshave either from adzed timber or from young saplings. Prickly mimosa makes very tough handles.

RAKE.

295. Bore auger hole in centre of one surface of a length (any suitable size) of 3 in. x 3 in. timber. Fix into it a handle of sapling or spokeshaved timber and brace with wire. Then hammer 6-in. nails at intervals through crosspiece. This rake should last for years.

DRILL RAKE.

296. (Illustrated.) Procure a 32 in. length of 4 in. x 4 in. timber. Bore a hole in the centre, and insert a handle of light sapling or shaped timber 4½ ft. long. Twelve inches on either side of the handle bore a hole in the rake on the side opposite the handle hole. Hammer into these holes two stout wooden pegs, each 12 in. long, for drill markers. A thin bar of iron 18 in. long, passed through the handle 2 in. from the end, enables one to use both hands to draw the rake.

SUMMER-HOUSE AND FERNERY.

297. A pleasant outdoor retreat in hot weather may be made very cheaply. A handy man could build up a framework with timber from trees on the farm, the only tools required to prepare the timber being an adze and an

axe. Build the frame to a height of about 10 ft., with a depth of 2 ft. underground, the wood underground being well cold-tarred. Nail battens all around the framework and over these train passion fruit, grape vines, creepers and roses. Rustic seats and tables look well, the under parts of them being made from fruit tree wood.

Plant treeferns and palms in the ground, and put smaller plants in tins, tubs, or boxes on the ground or on stands. Baskets made of tins with a long wire threaded through and hung from the ceiling, will hold small drooping ferns.

The butts of fern trees make excellent flower pots. Saw off a length of the trunk and shape it as desired, hollowing out the inside to hold the soil. A chair for the fernery may be made from a large treefern.

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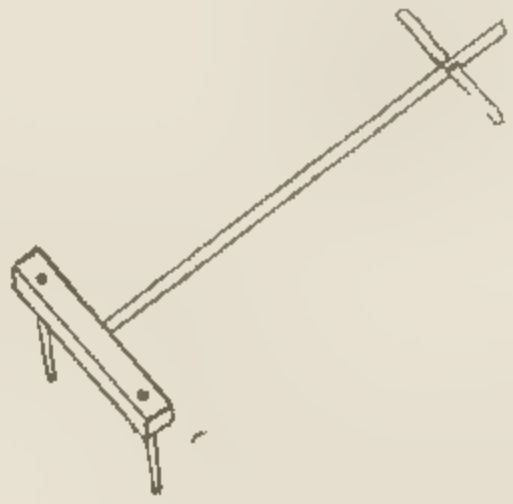

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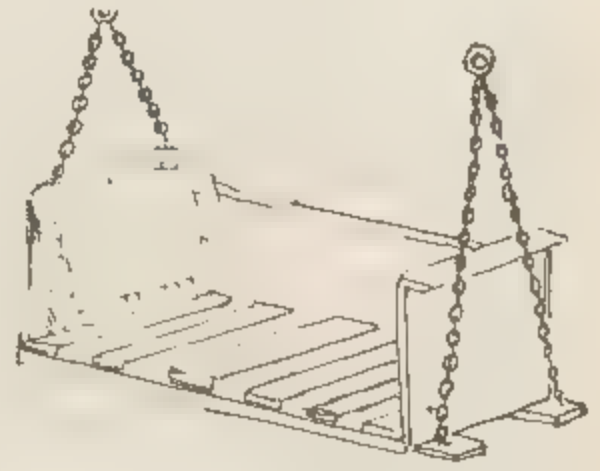

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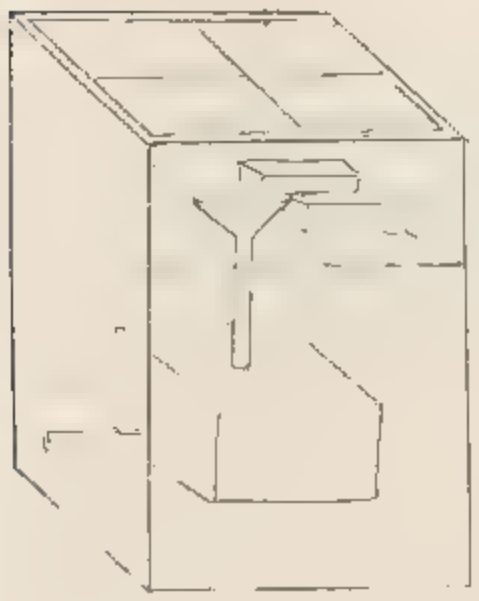

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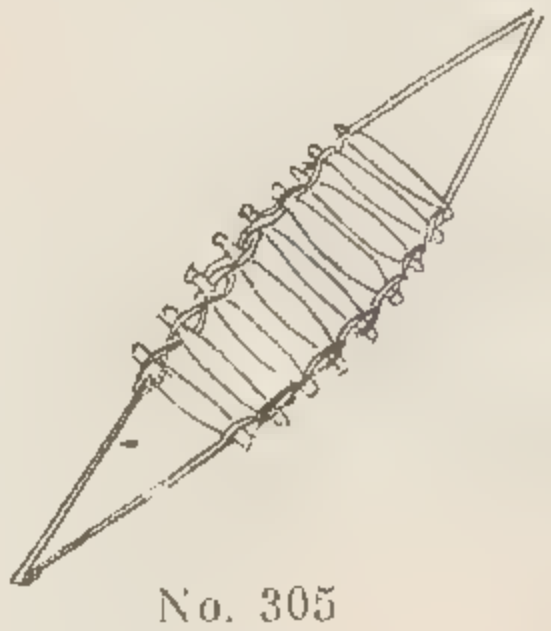

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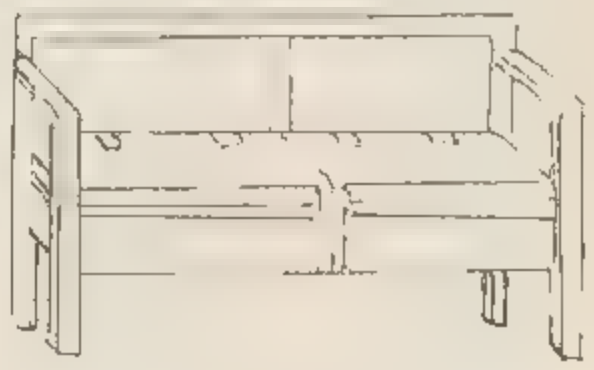

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GARDEN CORNER.

298. A 600, 800 or 1,000 gallon tank, with about a quarter cut out of the side and the lid left on, makes a snug corner in a garden, either to sit in or to raise flower and vegetable seeds away from the frost. If grape vines are trained over it the grapes will ripen earlier.

GARDEN WINDSCREEN.

299. An old tank cut in halves makes a couple of windscreens for the garden or the end of the verandah. Train creepers or climbing roses over it.

A WINDOW ADORNMENT.

300. Procure an ordinary bath sponge, the larger the better, and sow it full of rice, hemp, canary or grass seeds. Place it in a shallow vessel in which water is constantly kept. The sponge will absorb the moisture and in a few days the seed will begin to sprout. When this has fairly taken place, hang the sponge where it will get a little sun, refresh it daily with water, and in a few weeks it will be a mass of green foliage.

FLOWER POTS.

301. Glaxo tins, painted green, may be used for flower pots. Cut the top off the tin and make cuts 2 in. deep and ¾ in. apart all around the tin. Curl the pieces over, one twice and the next three times. Kerosene tins may be similarly used, but the cuts should be deeper and wider apart. Instead of being cut into strips, the top edges may be given a fancy cut and bent out slightly. Perforate the bottom of the tin to drain away the water.

FOR SEED BOXES.

302. (Illustrated.) The space between built-out chimneys, on the side of the house, may be roofed in and utilised as shown. A gable roof is preferable. Attach shelves to walls to hold seed boxes. At night a hessian curtain will keep out frosts. The roof may be made of flattened kerosene tins.

TO FORCE SEEDS.

303. (Illustrated.) Take a box about 2 ft. square by about 3 ft. high. About half fill it with sawdust. Construct and fit a hot water tin and funnel, with plugged draining pipe, as shown. Cover the not water tin with sawdust to a depth of three inches, more or less, according to heat required. Water put in boiling will retain heat for twenty-four hours. The seed tins rest on top of the sawdust.

AWNING.

304. Any number of sacks cut open and joined together may be attached to poles or trees for an awning. If treated with fat and tar it will be waterproof. See Nos. 270 and 311.

HAMMOCKS.

305. PATTERN A.—(Illustrated.) Take four ropes and a quantity of barrel staves. Place the staves as shown. Using two ropes for each side, run them alternatively over and under the staves and fasten securely near the end of each stave. With a rug or a mattress on it, this hammock is preferred by some to the ordinary net hammock. The curve of the staves gives a nice comfortable shape to it.

306. PATTERN B.—Take two large clean sacks and cut open to double the length. Place opened sacks side by side and join. At each end make a 2 in. hem and place rounded sticks through to keep sacks stretched. Then make a 3 in. hem along each side and draw rope through. Leave plenty of rope each end to tie to trees.

SWINGING SEAT.

307. (Illustrated.) A simple but cosy swinging seat for the garden or verandah may be made from two pieces of wood measuring 5 ft. 6 in. x 2 in. x 1½ in., four pieces 2 ft. x 1½ in. for uprights, four pieces 1 ft. 9 in. x 1½ in. for cross pieces, and one piece 5 ft. 9 in. long for the back. Fasten the two long pieces to the uprights with bolts and nuts, keeping the long pieces 14 in. apart. Cover the space with upholsterer's webbing. Then fasten on the back and cross pieces with bolts and nuts. Suspend the seat by a chain, rope or wire.

GARDEN SEAT.

308. (Illustrated.) Remove the boards from one side of two kerosene cases, and nail the cases end to end. Run battens up the four corners, the front ones to be 22 in. long, and standing 7 in. above the cases; the back ones 29 in. long and standing 14 in. above the cases, to act as back rests. Put a centre piece up the joins at the back, also reaching 14 in. above the cases. Add back and arm rails. With the boards taken off make two lids and secure to the cases with leather hinges. These make a useful receptacle for holding garden tools. A squab of dyed hessian stuffed with soft grass may be made to fit the box seat when under cover.

THE FARM.

FARM BUILDINGS.

309. Kerosene or petrol tins, with top and bottom cut out and the four sides flattened into one piece and painted or tarred, will last years if used for walls of fowlhouses, farm sheds and even dwellings. The kerosene-tin-lined dwelling was commonly used by miners on the Western Australian goldfields.

SEED STORAGE.

310. All sizes of old tanks make receptacles for seed, either loose or in bags, if the leak holes are stuffed up. Mice cannot get at seed stored in this way.

HAYSTACK COVER.

311. (Illustrated.) Any sized haystack or implement cover may be made from twenty-one sacks cut open and sewn together as shown. Make the cover waterproof and rotproof by giving two coats (both sides for preference) of Stockholm tar and unsalted mutton fat in equal quantities. About 1 lb. each of tar and dripping will give two bags a couple of coats on one side only. Melt the tar and fat in separate tins, then mix well together and apply hot with a whitewash brush. A large surface is best done in the sun on a hot day, when it will spread easily. Smaller surfaces may be done inside, the mixture being occasionally placed on the fire to keep it hot. See also No. 270.

THRESHING CLOTH.

312. (Illustrated.) Seven sacks cut open and one cut across the bottom. Hem all raw-edges and join together as shown. This makes a fair-sized sheet to catch chaff from a hand chaff-cutter. It may be used also for a hand-threshing cloth. Use more sacks for larger size.

FEED-BOX.

313. A kerosene case on the flat, with four legs attached, may be placed in a corner of the stall as a manger.

FEED BINS.

314. At the head of the stalls place two or three lined mouse-proof packing cases, with hinged lids, to hold chaff, oats and bran.

DRINKING TROUGHS.

315. PATTERN A.—(Illustrated.) Cut a kerosene tin in half cornerwise, as shown. Cut out an end of each piece and solder open ends together. Tack to a batten frame, covering cut edges. Attach four legs. Stand in corner of stable.

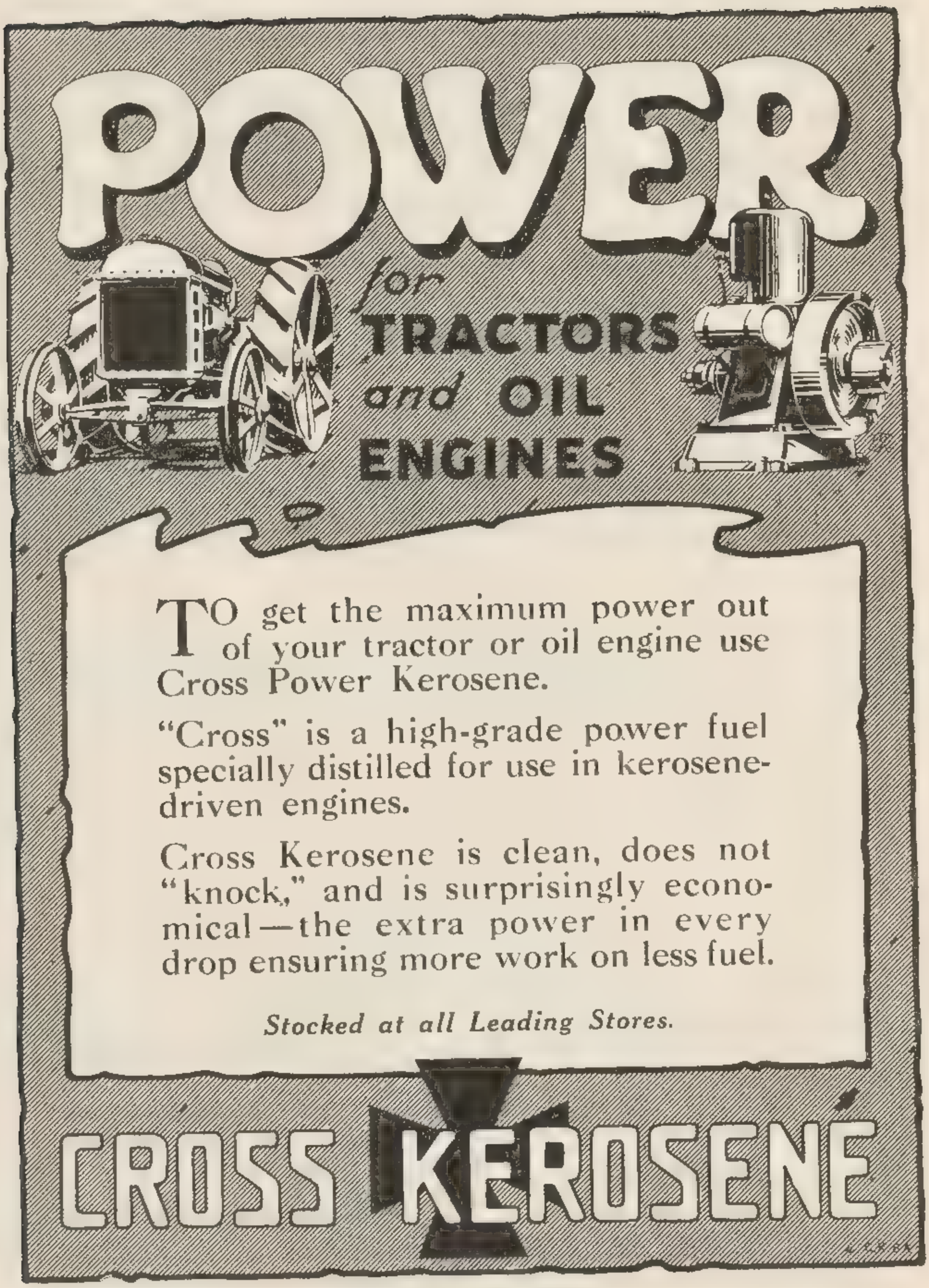
316. PATTERN B.—Cut a tank in half lengthwise and place strips of batten over the cut edges. Cement the insides and it will make two drinking troughs for horses or cows.

DRINKING VESSELS.

317. An old cask cut in half and placed in a paddock makes a good drinking tub for horses and cows.

ROPE-MAKING.

318. If you are the possessor of a rope-making machine, you may make handy ropes by saving the twine from the sheaves of hay. It is cheaper to make your own plough reins and ropes. Procure a ball of binder twine and a rope-making machine, and you will soon save the price of it.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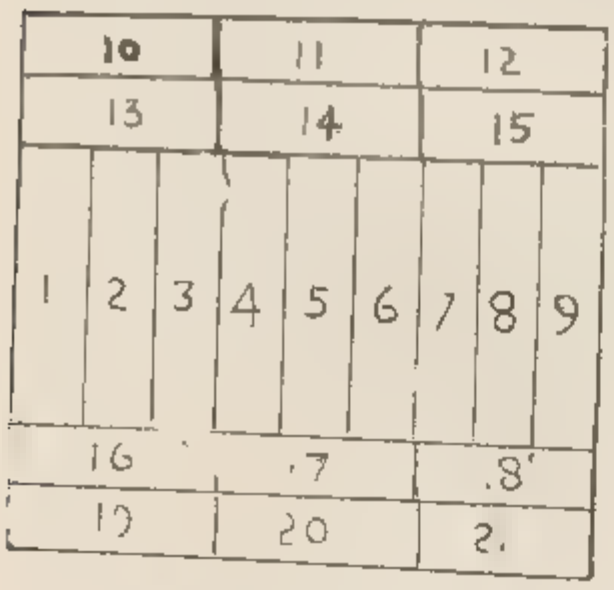
SWINGLE BAR.

319. Procure a 2 ft. 9 in. length of 3 in. by 2 in. timber. Bore a hole in the centre and one about 1½ inches from each end. Get the blacksmith to make three eye-bolts and put them through.

SLEDGES.

320. PATTERN A.—(Illustrated.) To make a sledge, procure two lengths of timber 6 ft. x 4 in. x 9 in. for the runners, and two lengths 3 ft. 3 in. x 6 in. x 2 in. for the cross pieces. Taper the latter two lengths to a width of 5 in. at the ends where they go through the mortice holes. The mortice holes are made in the runners about 10 in. from the back end of the sledge and



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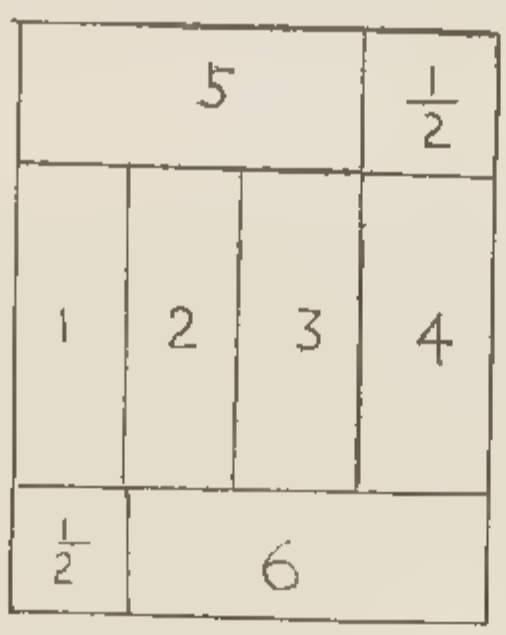

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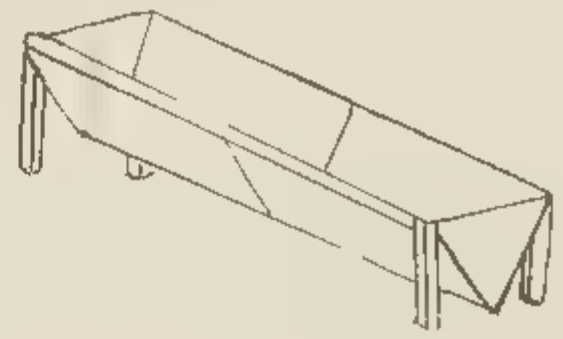
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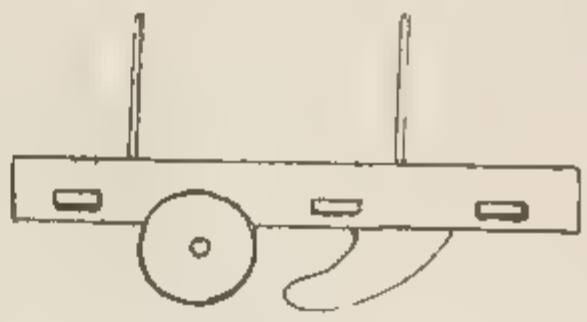
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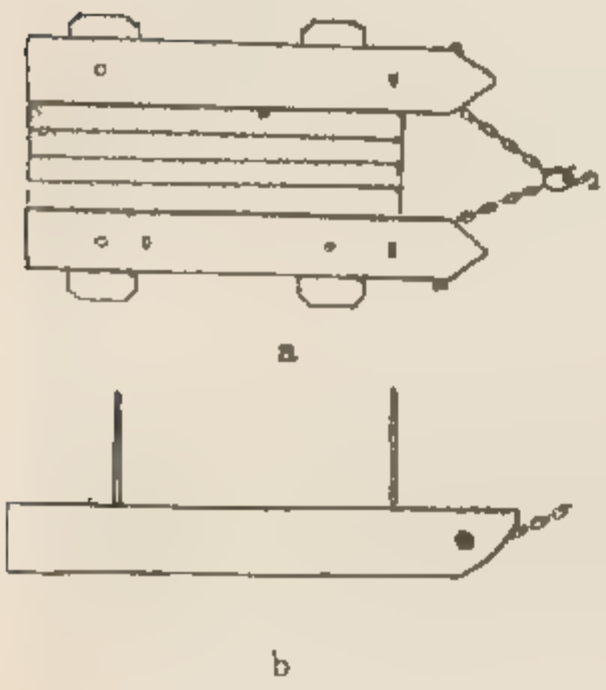

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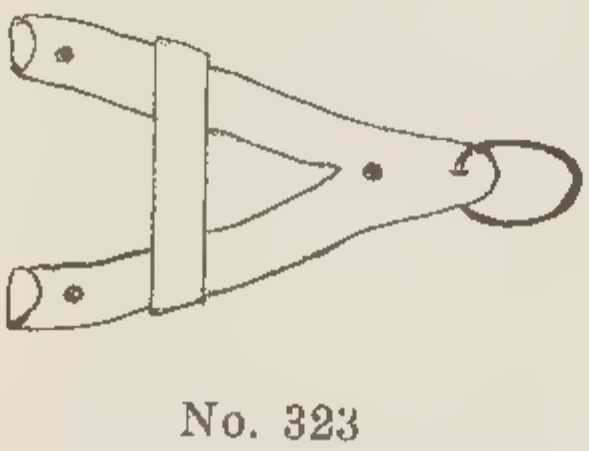
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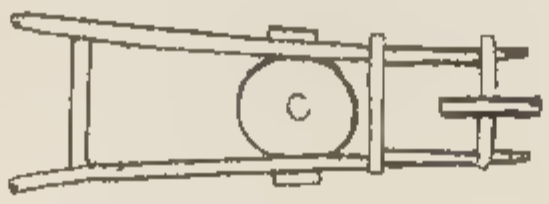

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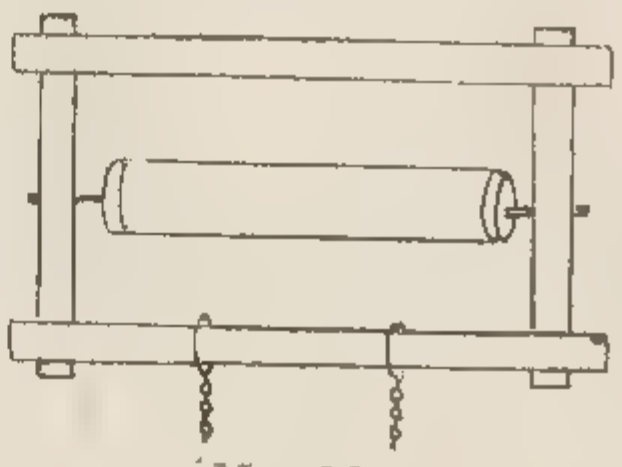
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about 14 in. from the front as shown. The fronts of the runners are curved underneath to enable the sledge to pass over small objects in the pathway. An auger hole is made sideways through the runners about 10 in. from the front, and a chain is passed from the inside to the outside through the holes and secured on the outside with staples. A large link is made with several thicknesses of strong wire in the centre of the chain, and an S hook joins it to the swingle-bar. Now nail palings or any timber to the cross pieces to form the floor of the sledge. Make auger holes just in front of each mortise on the runners and stand iron bars in them. These are to prevent logs of wood or bags of produce from falling off the sides of the sledge.

321. PATTERN B.—If the sledge is required for carting loose pumpkins, melons, &c., put wooden pegs about 2 in. x 2 in. and any length required into the auger holes instead of the iron bars. Nail palings around on to the wooden pegs and you have a box sledge from which nothing can fall. In this case, though, the back peg holes should be made behind the mortise holes.

322. PATTERN C.—If liked, the one sledge may be made to serve both purposes by having two auger holes at the back of the runners, one each side of the cross pieces. The iron bars may be pulled out and the box top put in place when barrels of water are being carted, and the iron bars replaced for holding wood. Pieces of iron from old bedsteads make good bars.

323. Pattern D.—(Illustrated.) A rough and ready sledge may be made from the fork of a tree. Nail a piece of board across the wide end, and chip the tree flat on either side near the fork. Bore a hole through the single end and thread several thicknesses of wire through it to form a 12 in. deep link. To this the swingle bar is attached. Bore three auger holes as shown, and bars or pegs may be hammered into them. When casks of water are being carted, ropes are tied around the pegs to keep the cask steady. Sledges may be made larger or smaller than shown.

HAY FRAME FOR SLEDGE.

324. Make the frame of two lengths of 2 in. x 2 in. or 3 in. x 3 in. sawn or adzed timber 4 in. longer than the sledge it is to be used on, and four lengths 40 in. longer than the width of the sledge. Thus a 6 ft. x 3 ft. 3 in. sledge will require a 9 ft. 4 in. x 6 ft. 7 in. frame. Nail the lengths together to form the frame and nail a second cross piece 20 in. from each end. When the frame is to be used the bars are taken out of the sledge, the frame fitted on, and 6 in. nails driven through the frame and into each end of the sledge runners. One man can load hay on this frame as it has not to be tossed high. A sledge is safer than a waggon or dray on a steep hillside. When removing the frame, hammer the nails up from underneath and leave them in the frame ready for the next time they are used.

TROLLY FOR LEVEL COUNTRY.

325. The body of this trolly is similar to that of the sledge except that it is not pointed in front. The wheels are made from red gum, stringy bark, or other tough kind of log, about 12 in. in diameter, and from 4 in. to 6 in. wide, fitted to an iron bar or an axle from an old vehicle. This trolly has the axle and wheels exactly in the centre. It runs easily in level country.

TROLLY FOR HILLY COUNTRY.

326. (Illustrated.) This trolly is 12 in. longer than the previous one, and has a third mortised cross piece added in front, to which is attached a block of wood to act as a brake when the trolly is going down hill. The wheels are placed one-fifth of the trolly length nearer the back than the front. The extra 12 in. and brake may be left out. but the axle would soon wear if the wheels were in centre for use in hilly districts.

The hay frame fits on the trolly in the same way as on the sledge.

CREAM-CAN CARRIER.

327. (Illustrated.) Take two 5 ft. 6 in. lengths of 2 in. x 2 in. timber. At one end, each length is rounded for the handles. At the other end fasten a piece of wood 9 in. x 6 in. for the wheel. Fix the wheel in position. The cross piece nearest the wheel should be just wide enough to allow frame handles to grip cream can firmly and lift it a few inches clear of the ground. The cross piece about 12 in. from the end of the handles should be wide enough to allow of the frame being slipped over the can. Pull the can handles out straight and draw frame toward you until the can handles rest firmly on the frame. Legs are not necessary.

ROLLER.

328. Pattern A.—(Illustrated.) To make a roller, use two 7 ft. 6 in. lengths of 3 in. x 2 in. timber in either split or sawn wood, two 4 ft. 3 in. lengths of 3 in. x 6 in. split timber, and a log 5 ft. 10 in. long and 12 in. through. Nail can rims would strengthen the ends of the roller. Bore a hole 4 in. deep into each end of the roller and hammer into them axle bars for another four inches, leaving 8 in. of the axle on the outside. Make mortise holes in the 6 in. side of the 4 ft. 3 in. lengths, and bore holes 21 in. from the front end of each piece. Hammer the 7 ft. 6in. lengths into the mortise

holes of one length and push the outside 8 in. of the axle through the hole. Then hammer on the second 4 ft. 3 in. length. Make a large loop of several twists of stout wire about 18 in. from each end of the front length. Bore a hole each side of the loops and pass a piece of wire through to form a staple at the back to keep the loops from slipping. Hook chains to these loops when one horse is used. For two horses, pass a chain through the loops, join the ends of the chain with a third loop, and to this attach a swingle-bar hook. The axle used in the original of this roller was 16 in. long, and was cut from the end of the handles of an old plough, the flat part being driven into the roller. A blacksmith would make the bars if none were available.

329. PATTERN B.—For a heavier roller, use a log 18 in. in diameter, and cask hoops for rims.

CLOD CRUSHER.

330. Clod crushers may be made in any length or width, and the number used will vary according to the number of horses used to pull them. For one horse, have four crushers attached to two cross pieces. The cross pieces should measure 6 ft. x 6 in. x 9 in. deep, and the crushers 6 ft. x 6 in. x 6 in. deep. The crushers are much the shape of fencing rails, indeed, the latter have been used for the purpose. They should be nicked into the frame lengths, and either bolted from the top or secured with 6 in. nails driven in slantwise. For three horses use six long crushers with a plank across the centre of the frame, and attach a seat to the plank for the driver. An old reaper seat has been used in this way.

TEMPORARY FENCES.

331. Barbed wire on top of sapling posts will make a temporary fence for a horse paddock. To keep in sheep, pigs, cows and calves add to the above a row of wire netting with rails above the wire netting. Staple the wire to the rail, putting about three staples between the posts and three forked sticks to keep the netting pegged into the ground.

PIONEER'S COW PADDOCK.

332. (Illustrated.) A contributor writes: Our selection was, of course, not fenced when we selected. There were several months of hard work ahead splitting posts, and carting and erecting same before our farm could be fenced in. There was plenty of natural grass and we decided to keep a cow. I bought a coil of fencing wire (which later on was used for the permanent fence) and then with brace and bit bored a hole about a foot from the ground through any saplings, logs, or stumps that were anywhere near the fence line. Where there were were no saplings, short posts were erected about half a chain apart. The wire was run through the holes and strained tight. I then attached to the cow's horns the device shown. In no case has a cow got out of this makeshift paddock. In the case of a wild cow, it is better first to teach her to tie up by the horns. The stick A is about 4 ft. long by 1¼ in. diameter. The chain, which is attached 6 in. from the forward end of the stick, is just long enough to carry the front end clear of the ground while the cow is in a natural walking position. When the cow attempts to step over the one-wire fence the forward end of the stick runs under and the animal is securely held. She soon learns that by turning back into the paddock she is again free to roam at will. A cart may be driven over the fence without damage, as the wheels merely press the wire to the ground and it immediately returns to its normal position.

COW RUGS.

333. Cut two sacks down one seam and cut one of the sacks across the bottom as well, joining it securely to the top of the other sack. Now make an opening in the bottom of the second sack, commencing two inches from the corner and finishing within two inches of the opened side. Turn back the

Hints for Power Kerosene Users

Ignition Lever.—Do not try to start the Engine with the Ignition Lever in the advanced position; a broken arm may be the result.

Difficulty in Starting.—If the Engine will not start readily try the following tests:—

1. Take the Sparking Plugs out and see that the spark is occurring at the points, and that they are clean.

2. Be sure you have the right fuel and that there is no water in the fuel tank or in the carburetter.

3. Examine the needle-valve of the carburetter; it may be clogged with dirt.

4. Examine the valves; they may be stuck, or not seating correctly.

Cylinder Lubricator.—The Cylinder Lubricator should always be kept filled and feeding at the correct rate. Insufficient lubrication will greatly reduce the power of the engine.

Fuel Supply.—It is a mistake to use too much kerosene. The engine develops most power when the exhaust is practically smokeless. Black smoke means too much kerosene; blue smoke means too much lubricating oil.

Batteries.—It is necessary to inspect your batteries and wiring periodically. The batteries should be kept clean and dry, and the wiring renewed, if the insulation is worn or burned through.

Engine Preservation.—It is false economy to use cheap lubricants. High-grade lubricating oil may cost a little more, but it is not necessary to use so much of a good lubricant as of an inferior one. A first-grade lubricating oil reduces the wear of the moving parts to an absolute minimum, and so prolongs the life of the engine and lessens the possibility of a breakdown.

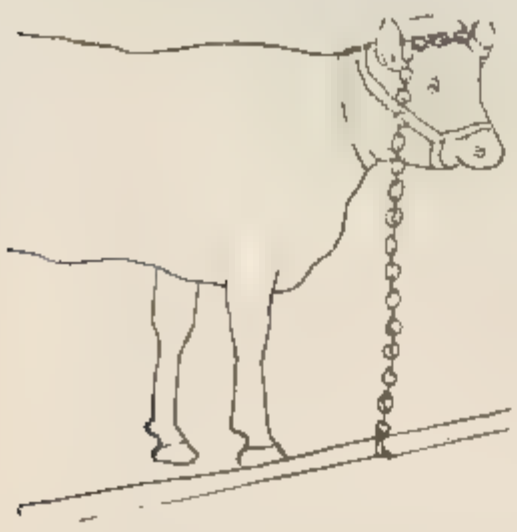
edges of the opening and hem. This opening is for the tail. To tie the rug in front, make a 1½ in. cut near each corner of first sack, and hem. Tie a rope in each hole. For a large cow, sew another half sack in front of first sack. Paint (as in No. 270 or No. 311) with tar and fat mixture.

CANVAS CARRIER.

334. (Illustrated.) A handy carrier may be made for carrying calves too weak to walk or to convey chips off land before plowing when clearing is going on. Take two light saplings 6 ft. long and a number of strong sacks or a 6 ft. length of hessian. Strongly sew together, then run a row of stitches on either side to fasten the hessian around the saplings.

PIG RACE.

335. (Illustrated.) Two stout pieces of timber, any required length, joined with 2 ft. lengths of rough timber to form a footing for the pigs. Nail



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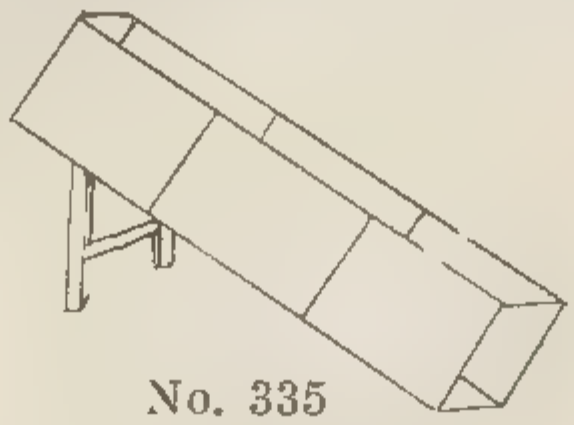

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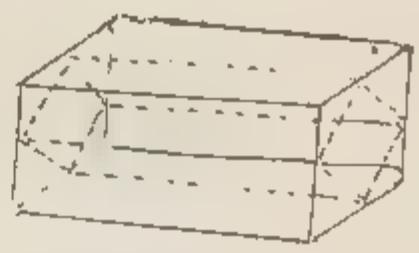

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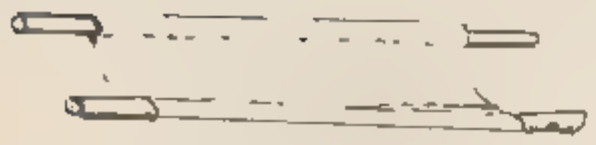

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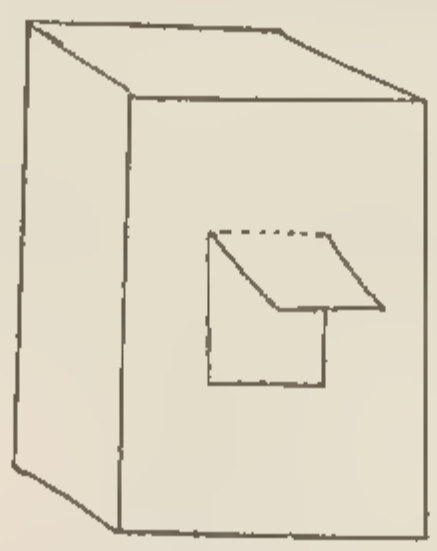

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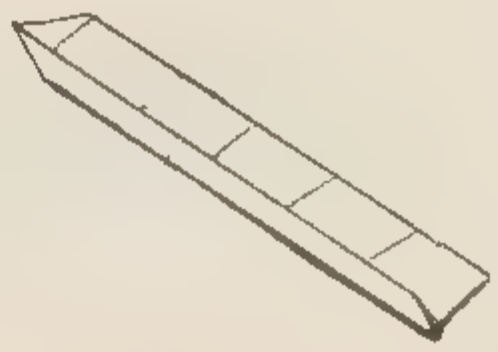

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No. 340

27 in. uprights at intervals and fix two rails on each side. If the race is long or is required for heavy pigs, bolt two stout legs to the floor, about two-thirds along.

PIG-SCRAPING TROUGH.

336. A half of a tank cut lengthwise, and either cemented or with the holes stuffed up, makes a good pig-scraping trough. Two pigs may be scraped at the one time.

BRUSHES.

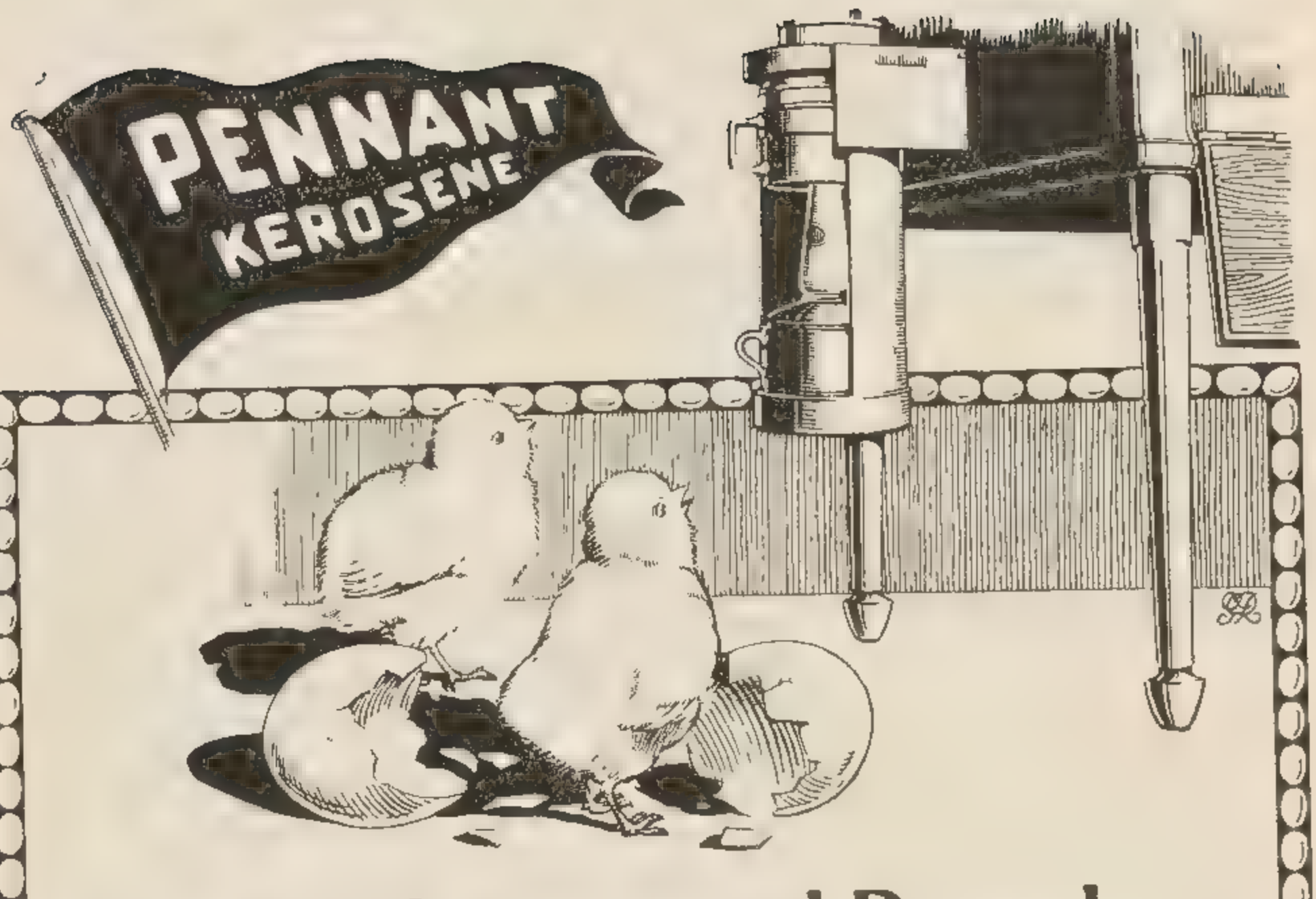
337. Partly worn hair brushes with long handles may be used for rubbing solution into cattle or pigs to kill lice.

FOOD MASHER.

338. A block of wood about 4 in. thick and 18 in. long, shaped somewhat like a beer bottle, will help to mash a quantity of pigs' or fowls' food quickly. A length of broom handle is convenient for mixing pollard in milk for pigs.

OUTSIDE FIRE-SCREEN.

339. When boiling pigs' food, portion of an old tank makes a good wind screen.



For Incubators and Brooders

there is no kerosene so reliable as "Pennant." Day and night it gives the same steady heat that can only vary with the alteration of the regulator.

When Pennant Kerosene is used, the cleanliness of wicks and burners is a revelation, while "Pennant's" freedom from smoke and fumes guards the health of the chicks in Brooders.

A Tribute to
PENNANT KEROSENE

From MR. H. W T HAMBLY,
"Trenevis" Poultry Farm,
Mascot, N S.W

"I have been using Pennant Kerosene for my Incubators and Brooder this season, and am pleased to state that it has given me great satisfaction. It is the cleanest oil yet found, and does not gives off any fumes. A splen did feature about this Kerosene is that corrosion of lamp wicks is practically eliminated. This feature should especially appeal to poultrymen."

(Sgd) *H W T HAMBLY.*

Ask at your Store for

Pennant Kerosene

P 18A

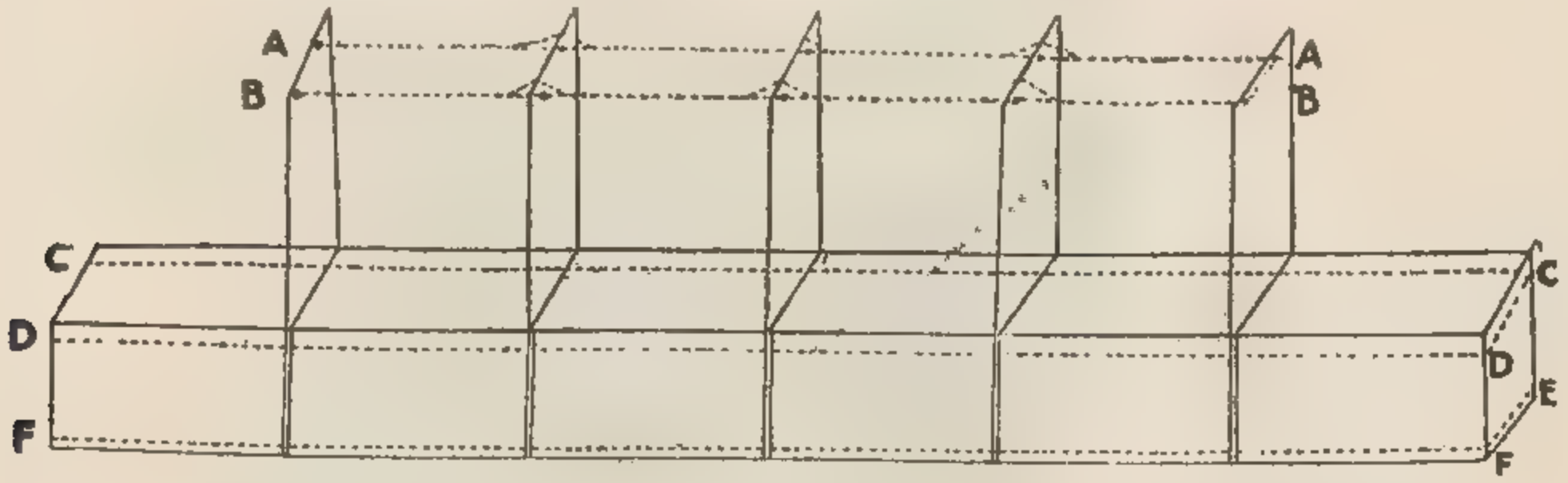
SHUTE FOR TROUGH.

340. (Illustrated.) Cut a kerosene tin in four lengthwise. This leaves a triangular piece at each end. Cut out seven of these end-pieces and solder the lengths together. Sometimes two lengths are sufficient. Milk will not be spilt if the shute is placed in a hole above the trough. Such a shute is useful in many ways on a farm.

PIG TROUGH.

341. A trough to hold milk and other pigs' food may be made from a hollowed log. This cannot be upset by the pigs.

342. A paling shaped like a canoe paddle makes a scraper for cleaning the trough before refilling.



No. 345

DRINKING VESSELS.

343. (Illustrated.) For poultry, take a kerosene tin and cut out a panel as shown, raising the piece cut so as to form a "verandah." If preferred, panels may be cut on two adjacent sides, the other sides always facing the sun. If only one panel is cut, the tin may be placed half through a hole in the wire netting enclosing the pen.

DUST BATHS.

344. Two or three kerosene boxes on the flat may be half filled with ashes and placed about the poultry yard for dust baths.

(See reference to chicken brooder under heading, "Bedwarmer," No. 363.)

VERMIN-PROOF NESTS.

345. (Illustrated.) Kerosene tins are opened on the side and turned at right angles to form division walls between the birds; and thus ensure privacy. A piece of wire is run through from A to A, and B to B. A fine piece of wire—indicated by a dotted line—holds the walls firmly in position. If this is not done, the birds will be continually knocking them down, with the result that the walls will break off from continuous bending to and fro. A wire is run through from C to C, across the end of the tins to D, and back to the starting end. The same applies from E to E, across the end to F, and back to the starting end. The wire is twitched at either end—indicated by AX. Thus we have a light, firm and portable set of nests. It is advisable to use a light piece of wood with a V cut in each end when twitching, otherwise the wire will probably cut into the tins at the ends. If procurable, pine needles should be used in lieu of straw. The chief advantages of these nests are:—(1) They are vermin-proof; (2) being light and strong, all of the nests may be removed in one operation when cleaning the poultry house; (3) they ensure privacy for the birds; (4) economy in construction; (5) durability.

FOR THE CHILDREN.

DE LUXE MOTOR BUS.

346. (Illustrated). Leason's famous cartoon in Melbourne "Punch" is true to life and indicates that boys get a maximum of enjoyment from makeshift toys.

No. 346

BOY'S CART.

347. (Illustrated). A long packing case attached to a pair of small wheels on an axle, and two strong battens nailed to sides of case for shafts, makes the boy's cart shown in illustration.

SURF FLOATER.

348. (Illustrated). Take four kerosene tins. Carefully repair and solder any holes so as to make the tins watertight. Construct a frame of 3 in. by 1 in. timber, as shown, two pieces being 6 ft. long and four crosspieces just long enough to allow the tins to be enclosed. Straps (or old carriage reins), tacked firmly to the crosspieces, will hold the tins in position.

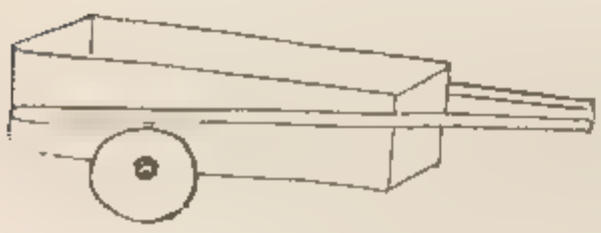
TRAIN ENGINE.

349. An ambitious ten-years-old engineer made a model locomotive about 6 ft. long with the aid of a carbide drum, a length of spouting, six perambu-

lator and tricycle wheels, and a quantity of case wood and flattened petrol tins. A seat was provided in the tender, and the engine was propelled by pedals from the old tricycle.

TOY LOCOMOTIVE.

350.—(Illustrated.) To make a toy locomotive, one long round and one oblong biscuit tin, a cayenne pepper tin, and four shinoleum or nugget tins are required, with a length of flooring board about an inch thick. Solder the pepper tin into a hole cut in the boiler (round biscuit tin). Paint boiler blue, the funnel black, the wooden base red, the fuel tender blue, and the wheels yellow, with black spokes.



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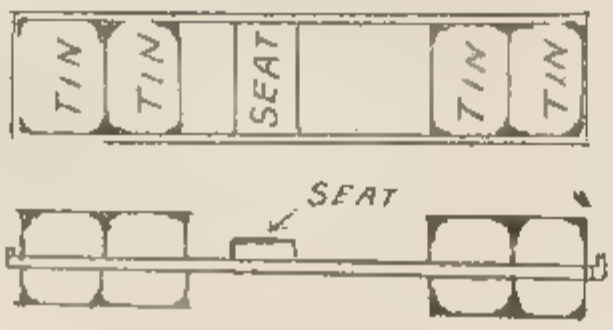

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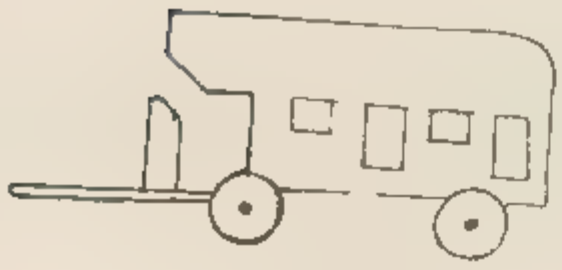

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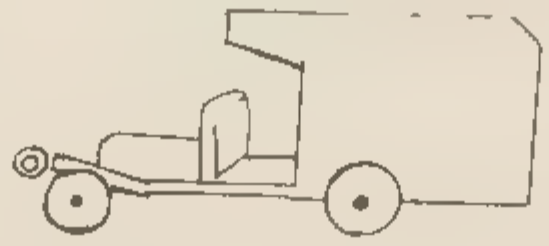

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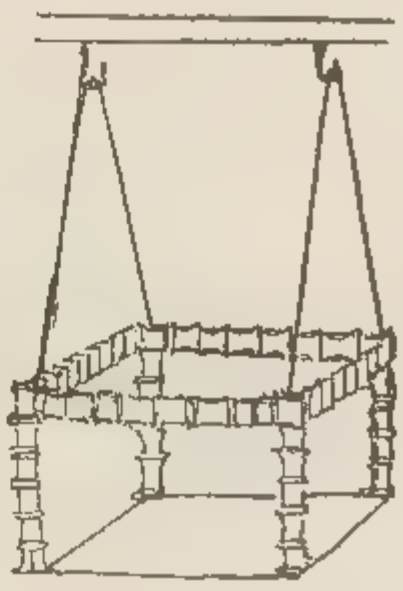

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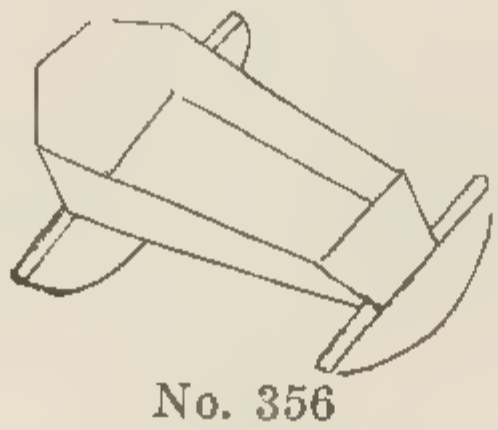

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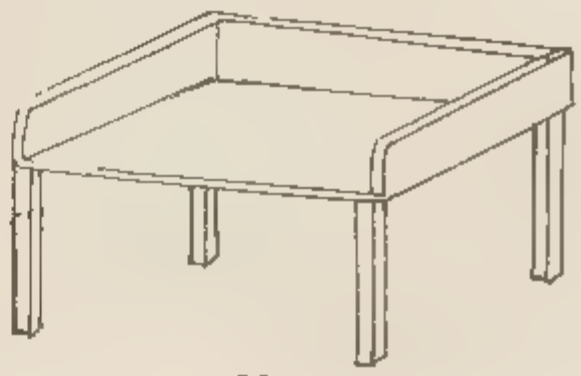


No. 357

TOY MOTOR BUS.

351. (Illustrated). The toy motor bus shown needs little explanation. Any handy man may easily construct it from a short piece of flooring board, part of a kerosene tin, a medium size Keen's mustard tin, four small kiwi or nugget tins and a few nails and screws. Paint as desired.

TOY MOTOR LORRY.

352. (Illustrated). The same remarks apply to the motor lorry. Nos 351 and 352 were among a large variety of toys constructed for a Christmas tide bazaar by a missions-fund enthusiast.

CHILD'S SWING.

353. (Illustrated) Screw two hooks into a beam under the verandah. Get a piece of board 10 in. by 14 in., and bore holes at the four corners. Attach a light galvanised wire to one of the hooks. Thread cotton reels on to it for a length of one foot and put the wire through one of the holes in the board. Pass the wire under the board to the other hole on the same side. Put the wire through this, thread on another foot length of reels and attach the wire again to the same hook so that the board is at the required height for the

swing. Repeat this on the other side of the board, attaching the wire to the other hook. Make a railing of reels to prevent the child from falling out by attaching another piece of wire to one corner of the swing just above the reels, threading enough reels to reach across to the next corner and so on around the swing. The appearance of the swing is improved by painting.

CHILD'S CHAIR.

354. (Illustrated). Take a butter box and cut off a piece about 8 in. wide from the bottom of one side and smooth the edges with sandpaper. If furnished with a cushion or pillow and lined with thick material or cheap cretonne, this would make a comfortable and safe chair for a baby.

BABY'S CHAIR.

355. An old chair without a back, turned upside down with its legs upright and securely fixed to a sofa or a case, makes a good substitute for a baby's chair.

BABY'S CRADLE.

356. (Illustrated). A packing case measuring about 28 by 22 in. by 15 in. makes a comfortable cradle. Take off the side pieces and make the end pieces 4 in. narrower at the bottom than at the top; also take a corresponding piece off the bottom width. Then nail the sides on again. From two pieces of 2 in. x 3 in. timber each 30 in. long make the shaped rockers and nail them through tht bottom of the box. Add a shaped piece of board to one end to form the head, and give the whole two coats of white enamel.

BABY'S PLAY-BOX AND TRAY.

357. (Illustrated). Make the play box from a case large enough to allow the child plenty of exercise, one measuring 3 ft. x 2 ft. x 18 in. being very suitable. Make a tray (as shown) to stand at one end of the box to hold playthings. The wood from another packing case may be used for this purpose. The tray is made to look like a pastry board on legs, but the ledge around the three sides needs to be about 6 in. deep to prevent the toys from falling out. When completed the tray should measure 2 ft. x 1 ft. x 18 in.

SUBSTITUTE FOR A BABY'S PRAM.

358. If you have no pram for your baby, place a pillow in a small tub, lay a blanket around so that baby cannot touch the cold tub. Then you may carry the tub by the handles, and keep baby near you as you work.

Another substitute is a wooden box placed on wheels, such as No. 347.

USEFUL HINTS

KEROSENE TIN OPENER.

359. A kerosene tin opener, which cuts and turns in the edge at the same time, is made from an old spade cut to a V-shape and fixed into a wooden top. Sharpen each edge. Put the point of the spade into the centre of the edge to be cut, and press down.

WEDGES, KNOBS AND FEET.

360. To fasten kerosene cases together where the tins are to act as drawers and run in and out, it is better to use "corrugated steel wedges" than screws. The "wedges" are hammered in from the outside, and do not touch the tins at all, whereas the screws sometimes do, and interfere with the free running of the drawers.

361. Kettle lid knobs, which can be bought from any ironmonger, and are 2d. or 3d. each, are firmer and more satisfactory for handles than cotton reels.

362. Indiarubber feet at 6d. each are very satisfactory for putting on to cases to raise them from the floor. They are round and about an inch in height. The price includes screws for fixing them to the cases.

BED-WARMER.

363. A solid round log of dry wood, warmed in the oven and wrapped in several newspapers or in flannel, will keep its heat twice as long as a hot bottle. The warmed log is also suitable for use in a chicken brooder.

CLOTHES HANGERS.

364. A smooth curved piece of wood, about 18 in., makes a simple coat hanger. Round off the edges and hang by a cord.

365. For trousers hanger, take two smooth straight pieces of wood. Tie them loosely but permanently at one end. The trousers are placed between them and the other ends are brought tightly together and secured by a couple of turns of the cord by which they are hung.

GREASE SPOTS.

366. Grease spots may be removed without injury from the finest fabrics with the following mixture:—1 quart rain water, 2 oz. ammonia, 1 teaspoonful saltpetre and 1 oz. shaving soap cut fine.

STORING CLOTHES.

367. To store clothes, hats or furs for a season, make a paper bag of the required size, place the article to be stored inside it, and machine around it to keep out moths and dust.

SKIRT HANGER.

368. If staying at a boarding house where little space is provided for hanging clothes, get an ordinary coat hanger and fasten two small hooks underneath it. Attach your skirts to these hooks and they will be kept in shape. If the skirts are made of light material, two or more may be hung on the same hook.

KNITTING NEEDLES.

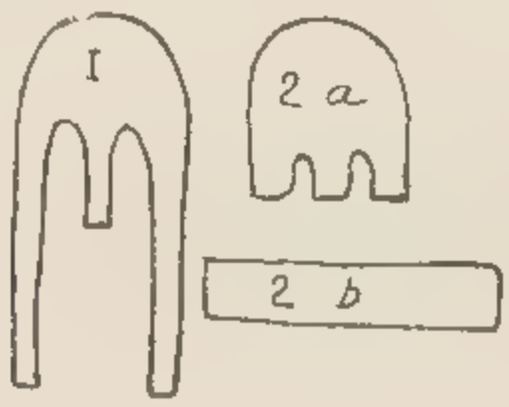
369. Different sizes of knitting needles may be made from various thicknesses of fencing wire filed to points. Blackwood makes nice wooden needles.

BUTTONS.

370. Buttons that will not break in the wash are made by folding a piece of linen four or five times, according to the quality of the material. Cut out to the size required and buttonhole around the edges. Sew on the usual way.

INNER SOLES.

371. (Illustrated.) Inner soles for warmth or for loose boots and shoes may be cut from old felt hats.



No. 372

No. 371

SLIPPERS.

372. ((Illustrated.) Ladies' and children's slippers may be made from old felt hats, but a stiffer felt is best for the soles for adults. Two styles of uppers are shown. The exact size and shape required may be obtained by cutting up a worn-out slipper and laying it flat on brown paper to get the pattern.

LAMP-WICKS.

373. Lampwicks may be cut from an old felt hat. Scrub the hat well with soapy water, rinse and thoroughly dry. Cut a strip of felt the same width as the burner and it will make a very satisfactory wick.

WORN-OUT TAN BOOTS.

374. A correspondent made the following use of an old pair of tan boots. She scrubbed the tops and tongues well in soapsuds. After taking out the lining, the inside of the leather looked like suede. This was rubbed with sandpaper to take off the gum and made the outside in making it up. The lace holes were cut off one boot, a piece of flannel tacked inside, and the two sides of the top of the boot were stitched together with strong yellow silk.

A hanger was made from the piece of yellow kid that lined the top of the boot, and by painting scallops around the edge and the word "kettle" across one side, a novel kettle-holder was completed.

375. The top of the other boot was similarly treated and made into a shaving tidy by punching a hole into a corner of each half and cutting papers the same size and placing them between the pieces of leather, the whole being threaded together and hung near the shaving stand.

376. The tongues of the boots were cleaned in the same way as the tops, pieces of flannel were cut to the same size and sewed between them, and the word "Needles" was painted on one tongue. A butterfly bow added to the top completed a neat needle case.

TO PRESERVE EGGS.

377. From 3-ply or other light wood make six shelves to fit into a kerosene case. Cut in the shelves rows of holes each just large enough to hold an egg upright. Put on the palm of the hand either butter, lard, dripping, or vaseline Smear each egg with it so as to close the pores. An ounce of butter will do about fourteen dozen eggs. Stand the eggs in the boards with the pointed end uppermost. They will keep for months.

RAT TRAP.

378. An ordinary rabbit trap will act as a rat trap. Melt some fat on to the plate and set the trap very lightly.

SWAT THAT FLY.

379. Take half teaspoonful of black pepper, 1 teaspoonful of brown sugar, and 1 tablespoonful of cream. Mix together and place in room where flies are troublesome. They will soon disappear.

COCKROACHES.

380. A mixture of plaster of Paris and dry flour placed in a saucer near their haunts, with another saucer full of water nearby, will rid the house of cockroaches. See that children and animals are kept away from the saucers.

PASTE.

381. Dissolve a cup of flour with the well-beaten white of an egg and enough cold skimmed milk to make a smooth paste. Strain through net. Pour this mixture into a pint and a half of boiling milk and water. Stand on the stove for a few minutes, when it will be ready to use.

WHITEWASH.

382. Slake half a bushel of quick lime with boiling water, keeping it well covered during the process. Strain, and add a peck of salt dissolved in warm water, 3 lbs. of rice boiled to a thin paste, half a pound of powdered Spanish whiting, and 1 lb. of clean glue dissolved in hot water. Mix all ingredients, and allow it to stand for several days. Make the mixture very hot before applying. It will dry with the brilliancy of paint. Any color paint powder may be added.

Another recipe for making whitewash will be found under the heading "Lining the Walls," No. 241.

COLD WATER PAINT.

383. Mix two lbs. of flour into a smooth paste with cold water. Pour boiling water over it, stirring all the time until it looks glossy and thin enough to run. Dissolve 4 lbs. of pipeclay or whiting in about half kerosene tin of cold water. Squeeze about with the hands until the mixture is smooth, and then add to the flour paste. Mix well with a stick. If too thick to paint with, add more water; if too thin, add whiting. Add a little dissolved Condy's crystals to get a pale biscuit color. It may be painted on the walls with a large, soft rag. When the first coat is dirty, scrub off and re-paint.

BROKEN CHINA.

384. Smear the broken edges with flake-white oil-paint. Press lightly together for a minute. Put the article aside for six months, by which time the edges will be firmly joined.

SAUCEPAN CEMENT.

385. Mix equal parts of putty, sifted coal and sifted table salt. Pack into hole. Place the article on the stove with a little water in it until the cement gets hard. It never fails and soon becomes as hard as the enamel.

TO CUT GLASS.

386. If a smaller piece of glass is to be cut from a broken window-pane, hold a red-hot piece of fencing wire straight on the glass where the cuts are to be made and dip the glass in cold water.

KEROSENE ENGINES

Their Proper Care

The successful operation of any engine, no matter whether the fuel be kerosene, benzine, coal or wood, depends upon the treatment meted out to it. In the city, where expert help is obtainable as soon as trouble develops, engine difficulties are not of as great moment as to the farmer who is often so situated that he cannot get the help he needs for many days, and frequently the getting of it involves considerable inconvenience, expense, and great loss of time. The farmer who uses an engine should be sure, before he condemns either engine or fuel, that the fault really lies with them and not with him. It is his duty, not only to the engine and the fuel he uses, but to himself, to make sure that the person responsible for the running of the engine is competent to get good results and to keep it in good order.

Kerosene as a Motor Fuel.

It has been stated on many occasions that kerosene is not clean, that cylinders carbonise frequently, and that the valves and valve-sets show a marked tendency to gum first and carbonise afterwards, and, in some cases, to become pitted. These conditions may be present, perhaps, when the kerosene is not properly used, but, given correct conditions of operation, kerosene is a clean fuel, and there are now many makes of engines designed to run on kerosene which give excellent results.

Carbonising Troubles.

Carbonising is usually due to a too rich mixture. The mixture should be adjusted till the exhaust gases are invisible; the least sign of blackness indicates that not enough air is being admitted to give complete combustion in the cylinder. A correct mixture of air and kerosene is necessary to give complete combustion and prevent carbonisation in the cylinders, valves, and valve seats, also the gumming or pitting of valves, cylinders and pistons.

It must be borne in mind that when insufficient air is admitted to the cylinder there is not enough oxygen present with the kerosene to produce complete combustion, consequently a part of the fuel remains in the form of carbon. Some of the carbon is

burnt on to the cylinder head and walls of the combustion chamber, and the remainder is blown out through the exhaust in a finely divided form, which is usually termed a black smoke. This not only damages the engine, but is extremely wasteful, since no power is derived from that part of the kerosene which is deposited in the form of carbon.

Loss of Power.

Loss of power is directly traceable to carbonising, dirt, improper or insufficient lubrication, use of the wrong grade of lubricating oil. Care should be taken that the engine is kept as clean as possible, that the bearings are provided with proper means for distributing the oil, and that the oil channels and oil feed pipes are clean and lead in the right direction. Provision should also be made for all these parts to be reasonably protected from the entry of dust and dirt. A suitable lubricating oil is also essential to the best performance of an engine, and, as the advice of a lubricating specialist is always readily obtainable, it is wisest to get his recommendation as to the correct lubricating oil for the engine.

Supplement

SUMMER CAMPS

A SCHEME FOR THE INLANDER

By Miss Alice Currie.

A CALL FROM THE INLAND.

The following model camp scheme was devised by the writer in 1913 in response to an appeal by Mrs. Frances Moore, of Angledool. It was enthusiastically endorsed at a public meeting in Sydney, and the "Seaside Camp Association" was formed. Subsequently the then Minister of Lands, Mr. Trefle, granted permissive occupancy of three acres of public reserve, and the Narrabeen Council approved the establishment of the first model camp. It was intended for outback women and children of limited means, and was to be properly organised, supervised and sanitated, and to be self-supporting by means of moderate charges. The war intervened, and the scheme lapsed.

A HEALTH MEASURE.

The young growing generation should have every chance to develop a strong and healthy physique, one of the greatest assets of any nation. Outback families, the mothers and children especially, should have the opportunity of escaping from the extreme heat, and of enjoying sea bathing and the invigorating sea breezes of the coast. A farmer's wife writes as follows:—

"None of my children has ever seen the sea. We cannot afford to go away "and pay ordinary rates for board and lodging in the summer. If a camp "such as you write about were established, it would be the greatest boon, "and we would gladly pay our way if the cost were moderate. I feel sure "there are many others similarly situated."

ORGANISATION.

No plan involving great outlay for only a limited number can meet the need. The initial expenses should be reduced to the minimum, consistent with comfort and efficiency, so as to accommodate as many as possible and at least expense.

The initial cost should be borne by the district organising it. A progress association or other local society should apply to a seaside municipality for permission to establish a model camp.

The camps might be closed during the winter months, or turned to financial advantage by being let to reputable camping parties.

The staff would vary according to the size of the camp, usually consisting of a married couple to cook and be responsible for all equipment and order of camp, and a "handy man" as general assistant.

There should be no harassing restrictions, but no litter should be allowed, and care must be taken that no cause for complaint be given to local residents.

Three good meals daily should be provided, all fresh food being obtained locally and other supplies bought wholesale.

There should be an outside fireplace on the beach for pic-nic teas.

BUILDINGS.

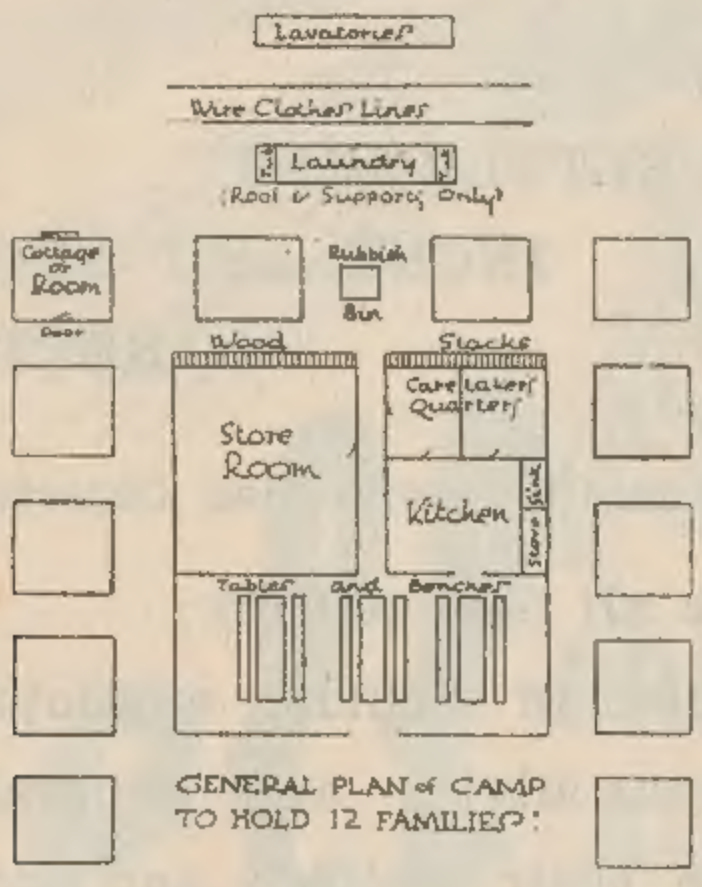
The main feature of the scheme is a central building consisting of dining shelter, kitchen, caretaker's quarters and storeroom, as shown in the illustration. Around it would be small, neatly constructed "huts" or sleeping shelters, all to be uniform in construction, and in lines, nothing being

haphazard or unsightly. Tents might be kept in reserve for use if required. Water supply, material for buildings, methods of lighting and sanitation should be decided by experts, according to the circumstances of the locality.

A laundry shelter, with outside boilers, would be necessary for use of the campers.

EQUIPMENT.

Very little furniture would be needed, and might be all "built-in" or made on the spot from designs in this booklet. As far as possible there should be nothing breakable, and simplicity with the essentials for comfort and efficiency should be the guiding principle.



GENERAL PLAN of CAMP TO HOLD 12 FAMILIES.

The time spent at the camp should benefit the mothers not only for the physical rest and change. It might be made the opportunity for showing labor-saving devices, fireless cooking, first-aid and anything likely to be of use to them.

ALTERNATIVE METHODS.

I. An organization to construct the central building, sanitation and laundry shelter, water supply and lighting, and provide staff and equipment. Inland districts to be invited to build their own sleeping huts whereby the camp might be indefintely expanded.

II. Central building, storeroom and caretaker's quarters only. The caretaker to be in charge of all equipment and hire it out to the campers. Self-contained huts or cottages, the occupants to do their own cooking. This plan would give more privacy, but the scheme of which the main points have been set out above would mean more rest for the mothers.

ALICE CURRIE.

23 Tintern Avenue,
Toorak, Victoria.

THE NEW SETTLERS LEAGUE OF AUSTRALIA

Is an Association of Representatives of All Progressive and Welfare Societies Interested in its General Objective:

MORE POPULATION

CLOSER SETTLEMENT

INCREASED PRODUCTION

BETTER CONDITIONS

And in its Immigration Objective:

To welcome all new settlers;
To assist them in securing employment;
To offer them advice; and, generally,
To promote their welfare and settlement.

HEAD OFFICES OF STATE DIVISIONS.

Western Australia.
St. George's Terrace,
Perth.

Tasmania.
Immigration Offices,
Launceston.

Queensland.
Main Street,
Kangaroo Point,
Brisbane.

New South Wales.
Labor & Industry Building,
Lower George Street,
Sydney.

Victoria.
Fink's Buildings, 6a Elizabeth Street,
Melbourne.

EXTRACT FROM REPORT OF OVERSEA SETTLEMENT DELEGATION.

"The New Settlers League was formed in 1921 with the object of stimulating interest in migration and of co-ordinating the efforts of the various bodies in each State concerned therewith. The vitality of the individual branches naturally varies considerably. A comprehensive organisation, such as is aimed at, cannot be called into being in a moment. But during our travels through the country, we met many of the branch representatives in the various States, and we are satisfied that in many districts most valuable work is being carried out, not only in introducing new settlers into the social life of the district, but in helping them through difficulties, and in particular in finding fresh employment for those who become unemployed and vacancies for those who have not yet arrived. We believe that this organisation is capable of performing services of the greatest value."

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